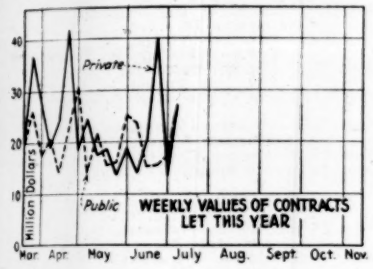
CONSTRUCTION NEWS

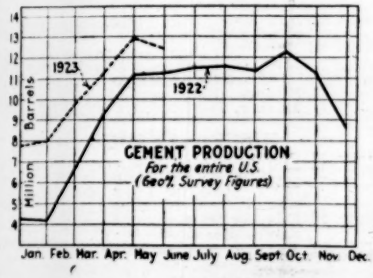
Engineering News-Record, July 26, 1923.

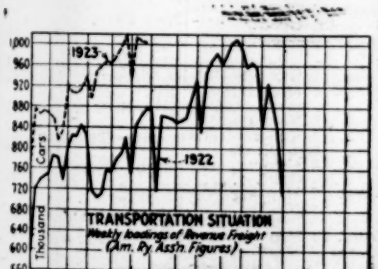
The Construction Barometer

No Falling Off in Business—Seasonal Decline in Production

ALTHOUGH general business as indicated by bank debits and car loadings is holding up, production is being decreased, all as shown by the charts. New construction is being placed at a normal rate — $33,000,000 in large contracts last week (*E. N.-R.* figures). At the same time it must be considered that for the last three months the U. S. Steel Corporation has been catching up on its orders. The price situation is outlined, as usual, on the page to the left of this. Next week — construction cost.







E. N.-R. Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
July 5	$17,438,000	$13,460,000	$30,898,000
July 12	26,812,000	27,135,000	53,947,000
July 19	14,514,000	18,552,000	33,066,000
3 weeks	$58,764,000	$59,147,000	$117,911,000

LARGE BUILDING CONTRACTS— NUMBER AND VALUE

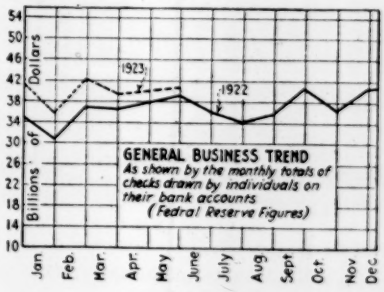
Week Ended	Public No.	Public Work	Private No.	Private Work
July 5	5	$2,794,000	24	$6,615,000
July 12	10	2,409,000	32	20,619,000
July 19	12	4,681,000	34	13,523,000
3 weeks	27	$9,884,000	90	$40,757,000

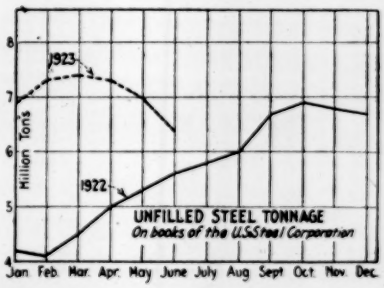
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

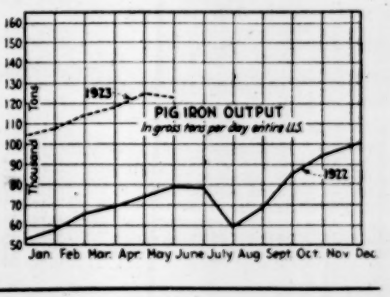
Week Ended	Private	Public All	Public Streets and Roads	Public Waterworks and Sewers	Public All Buildings
July 5	27	158	71	24	30
July 12	32	161	73	38	42
July 19	30	223	86	37	42

BASE PRICES UNCHANGED DURING LAST THREE WEEKS

	Quoted On July 26, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl.	2.20	2.05	Feb. 1
Pine, N. Y., M.ft.	58.00	59.00	July 5
Fir, San Fran., M.ft.	41.00	39.00	Apr. 5
Common labor, hr.	.54	.53	June 28


Billions of Dollars
1923
1922
GENERAL BUSINESS TREND
As shown by the monthly totals of checks drawn by individuals on their bank accounts
(Federal Reserve Figures)
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.


Million Tons
1923
1922
UNFILLED STEEL TONNAGE
On books of the U.S. Steel Corporation
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.



PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
July 30	Scranton, Pa.	July 19
July 30	Bartlett, Ill.	July 26
July 30	West Chicago, Ill.	July 26
July 30	Monroe, Mich.	July 26
Aug. 1	Raleigh, N. C.	July 19
Aug. 1	Jackson, Mich.	July 19
Aug. 1	Ft. Smith, Ark.	July 26
Aug. 1	Detroit, Mich.	July 26
Aug. 1	Baltimore, Md.	July 26
Aug. 2	Le Sueur Center, Minn.	July 26
Aug. 2	Westerville, O.	July 26
Aug. 6	Stone Harbor, N. J. Adv. July 19 and 26.	July 19
Aug. 6	Flandreau, S. D.	July 26
Aug. 7	Bedford, O.	July 26
Aug. 10	Cleveland, O. Adv. July 26.	July 26
Aug. 14	Douglas, Wyo.	July 26
Aug. 15	Jennings Lodge, Ore.	July 26
Aug. 15	Memphis, Tenn. Adv. July 26.	July 26
Aug. 15	Wellsburg, W. Va. Adv. July 26.	July 26
Aug. 16	Evanston, Ill.	July 19
Aug. 21	Detroit, Mich. Adv. July 26.	July 26
Aug. 22	Andrews, S. C.	July 26
Aug. 26	Pennington, N. J.	July 26
Aug. 27	San Diego, Calif.	July 26
Aug. 29	Watertown, S. D. Adv. July 26.	July 26

SEWERS

July 31	Wash., D. C.	July 12
July 31	Chicago, Ill.	July 26
July 31	Ridgefield Park, N. J.	July 26
July 31	Burlington, Ia.	July 26
July 31	Columbus, O.	July 26
July 31	Long Island City, N. Y.	July 26
Aug. 1	Maplewood St. Louis P. O., Mo.	July 26
Aug. 1	Baltimore, Md.	July 26
Aug. 1	Brooklyn, N. Y.	July 26
Aug. 2	Des Moines, Ia. Adv. July 26.	July 26
Aug. 2	Lewistown, Pa.	July 26
Aug. 3	Delaware, O.	July 26
Aug. 6	Euclid, O.	July 26
Aug. 7	Rhinelander, Wis.	July 19
Aug. 7	Bedford, O.	July 26
Aug. 8	Baltimore, Md. Adv. July 26.	July 26
Aug. 10	Millville, N. J. Adv. July 26.	July 26
Aug. 13	Arvada, Colo.	July 12
Aug. 13	Pensauken (Camden P. O.), N. J.	July 19
Aug. 16	Haddonfield, N. J. Adv. July 26.	July 26
Aug. 22	Andrews, S. C.	July 26
Aug. 24	Spencer, W. Va. Adv. July 19 and 26.	July 26

WASTE DISPOSAL

July 31	Johnstown, Pa.	July 26

BRIDGES

July 28	Charlottesville, Va. Adv. July 19 and 26.	July 19
July 30	Scarsdale, N. Y. Adv. July 12 to 26.	July 19

Bids Close		See Eng. News-Record
July 30	Clintonville, Pa.	July 19
July 30	New York	July 26
July 31	Alabama	July 12
July 31	La Center, Wash.	July 19
July 31	Illinois	July 19
July 31	Maryland Adv. July 19 and 26.	July 26
July 31	Ohio	July 26
Aug. 1	Binghamton, N. Y.	June 28
Aug. 1	Ansonia, Conn.	July 12
Aug. 2	New Jersey Adv. July 19 and 26.	July 19
Aug. 3	New York Adv. July 26.	July 26
Aug. 3	Waycross, Ga.	July 26
Aug. 4	Rawlins, Wyo.	July 26
Aug. 6	California	July 19
Aug. 6	North Adams, Mass. Adv. July 26.	July 26
Aug. 6	Daytona, Fla.	July 26
Aug. 6	Yreka, Calif.	July 26
Aug. 7	Beaumont, Tex.	July 5
Aug. 7	Forrestville, Conn.	July 26
Aug. 8	Ventura, Calif.	July 26
Aug. 10	Murfreesboro, Tenn.	July 19
Aug. 13	New Jersey	July 26
Aug. 14	Charleston, S. C.	July 5
Aug. 14	Baton Rouge, La.	July 26
Aug. 15	Phila., Pa.	July 5
Aug. 17	Allenhurst, Fla.	July 26
Aug. 17	Clendenin, W. Va. Adv. July 26.	July 26
Aug. 23	Clearwater, Fla. Adv. July 19 and 26.	July 26
Sept. 11	New Jersey Adv. July 26.	July 26
Nov. 30	Sydney, Australia	Apr. 19

RAILWAYS

July 31	Mexico	July 19

EXCAVATION, DRAINAGE, IRRIGATION

July 27	St. Emelie, Que.	July 26
Aug. 1	Sioux City, Ia.	July 12
Aug. 1	Brownsville, Tex.	July 19
Aug. 1	Harlinger, Tex.	July 26
Aug. 3	Worthington, Minn.	July 26
Aug. 8	Sioux City, Ia.	July 19

STREETS AND ROADS

July 25	Rhode Island	July 26
July 30	New York Adv. July 12 to 26.	July 19
July 30	Keyport, N. J. Adv. July 19 and 26.	July 19
July 30	New Jersey Adv. July 19 and 26.	July 19
July 30	St. George, N. Y.	July 26
July 30	Tavares, Fla.	July 26
July 31	Alabama	July 12
July 31	Wind Gap, Pa. Adv. July 12 to 26.	July 12
July 31	Michigan	July 19
July 31	Milton, Pa. Adv. July 19 and 26.	July 19
July 31	Maryland Adv. July 19 and 26.	July 19
July 31	New York Adv. July 12 to 26.	July 19
July 31	Illinois	July 19
July 31	Washington	July 19
July 31	Barnsdall, Okla.	July 19
July 31	New Hampshire	July 26
July 31	Ohio	July 26
July 31	Inverness, Fla.	July 26
July 31	Columbus, O.	July 26
July 31	Massachusetts	July 26
July 31	Wisconsin	July 26
July 31	Eastland, Tex.	July 26
July 31	Long Island City, N. Y.	July 26
Aug. 1	New Jersey	July 19
Aug. 1	Bellaire, O.	July 26
Aug. 1	Michigan	July 26
Aug. 1	Baltimore, Md.	July 26
Aug. 1	Brooklyn, N. Y.	July 26
Aug. 2	Tallahassee, Fla. July 5 to 26.	July 12
Aug. 2	Vicksburg, Miss.	July 19
Aug. 2	New Jersey Adv. July 19 and 26.	July 19
Aug. 2	Vermont Adv. July 19 and 26.	July 26
Aug. 2	Baton Route, La.	July 26
Aug. 3	Georgia	July 19
Aug. 3	Canton, Miss.	July 19
Aug. 3	Cincinnati, O.	July 26
Aug. 3	Arizona	July 26
Aug. 3	Independence, Kan.	July 26
Aug. 3	Georgia	July 26
Aug. 6	Sayre, Okla.	July 12
Aug. 6	St. Paul, Minn.	July 19
Aug. 6	Park Ridge, N. J. Adv. July 26.	July 26
Aug. 6	Cleveland, O.	July 26
Aug. 6	Yreka, Calif.	July 26
Aug. 6	Belzoni, Miss.	July 26
Aug. 6	Lewistown, Pa.	July 26
Aug. 6	New Jersey Adv. July 26.	July 26
Aug. 6	California	July 26
Aug. 6	St. Paul, Minn.	July 26
Aug. 6	De Land, Fla.	July 26
Aug. 6	Michigan	July 26
Aug. 7	St. Louis, Mo.	July 12
Aug. 7	Pennsylvania	July 19
Aug. 7	Beaumont, Tex.	July 19
Aug. 7	Wapallo, Ia.	July 26
Aug. 7	Quebec	July 26
Aug. 7	Rayville, La.	July 26
Aug. 7	Louisiana	July 26
Aug. 7	Gulfport, Miss.	July 26
Aug. 7	Baton Rouge, La. Adv. July 26.	July 26
Aug. 7	Michigan	July 26
Aug. 7	North Milwaukee, Wis.	July 26
Aug. 7	Washington	July 26
Aug. 8	Pennsylvania	July 19
Aug. 8	Freehold, N. J. Adv. July 26.	July 26
Aug. 8	Mays Landing, N. J. Adv. July 19 and 26.	July 26
Aug. 8	Florida	July 26
Aug. 8	Dover, Del. Adv. July 26.	July 26
Aug. 8	Knoxville, Ia.	July 26
Aug. 8	Michigan	July 26
Aug. 9	Michigan	July 26
Aug. 9	Gulfport, Miss.	July 26
Aug. 9	Walterboro, S. C.	July 26
Aug. 10	Utah	July 26
Aug. 10	New York Adv. July 26.	July 26
Aug. 10	Tennessee Adv. July 26.	July 26
Aug. 10	Bennington, Kan.	July 26
Aug. 10	Greensburg, Pa.	July 26
Aug. 11	Grenada, Miss.	July 19
Aug. 13	Akron, O.	July 26
Aug. 13	California	July 26
Aug. 13	White Bear (White Bear Lake P. O.), Minn.	July 26
Aug. 13	Kansas City, Kan.	July 26
Aug. 14	St. Louis, Mo.	July 19
Aug. 14	Fayetteville, W. Va. Adv. July 19 and 26.	July 19
Aug. 14	Louisiana	July 26
Aug. 14	Bluefield, W. Va. Adv. July 26.	July 26
Aug. 14	Clarksburg, W. Va.	July 26
Aug. 23	Clearwater, Fla. Adv. July 19 and 26.	July 26
Aug. 23	Yakima, Wash.	July 26
Aug. 27	Bessemer, Ala.	July 26

INDUSTRIAL WORK

July 28	Collingwood, Ont.	July 26
July 30	Cincinnati, O.	July 26
July 31	Ossining, N. Y.	July 19
Aug. 6	East View, N. Y. Adv. July 26.	July 26

BUILDINGS

July 30	Springfield, Mass.	July 26
July 30	Cambridge (Boston P. O.), Mass.	July 26
July 31	Mt. Vernon, N. Y.	July 5
July 31	Conrad, Ia.	July 19
July 31	Olympia, Wash.	July 19
July 31	Milwaukee, Wis.	July 26
Aug. 1	Jackson, Miss.	June 21
Aug. 1	Austin, Tex.	July 19
Aug. 1	Verona, Wis.	July 26
Aug. 4	Kamloop, B. C.	July 26
Aug. 6	Syracuse, N. Y.	July 19
Aug. 6	Scotia, N. Y.	July 26
Aug. 6	Scranton, Pa.	July 26
Aug. 7	Corsicana, Tex.	July 12
Aug. 7	Alpena, Mich.	July 26
Aug. 9	Granville, O.	July 19
Aug. 10	New Orleans, La.	July 19
Aug. 11	Centerville, Calif.	July 19
Aug. 13	Zanesville, O.	July 19
Aug. 14	Nashville, Tenn.	July 19
Aug. 14	Brooklyn, N. Y.	July 26
Aug. 15	Eagle Lake, Tex.	July 19
Aug. 15	Amsterdam, N. Y.	July 19
Aug. 15	Dallas, Tex.	July 12
Aug. 15	Dallas, Tex.	July 19
Aug. 16	Nashville, Tenn.	July 19
Aug. 20	Williamstown, Mass.	July 26
Aug. 20	Ft. Worth, Tex.	July 26
Aug. 21	Hartford, Conn.	July 19
Sept. 4	Wende (Millgrove P. O.), N. Y.	July 26
Sept. 15	Dallas, Tex.	July 26
Sept. 28	Institute, W. Va.	July 26
Nov. 1	Ft. Worth, Tex.	July 12

FEDERAL GOVERNMENT WORK

July 30	Stone—Detroit, Mich. July 5 to 26.	July 5
July 30	Breakwater—Alpena, Mich.	July 12
July 30	Pump—Louisville, Ky.	July 26
July 31	Dredging—Baltimore, Md. Adv. June 28 to July 26.	June 28
July 31	Remodeling—Albuquerque, N. M.	July 12
July 31	Road—Wyoming	July 26
Aug. 2	Excavation — Wilmington, Del. Adv. July 5 to 26.	July 5
Aug. 3	Dredging, etc.—Buffalo, N. Y. Adv. July 19 and 26.	July 26
Aug. 4	Dikes, etc.—New Orleans, La. Adv. July 12 and 26.	July 12
Aug. 4	Jetty—New Orleans, La.	July 19
Aug. 6	Extension—Spartanburg, S. C.	July 12
Aug. 6	Removal—Seattle, Wash.	July 19
Aug. 6	Road—New Mexico	July 26
Aug. 7	Water System, Neenah, Wis.	July 12
Aug. 7	Driveway—Fond du Lac, Wis.	July 12
Aug. 8	Buildings—St. Juliens Creek, Va.	July 12
Aug. 8	Remodeling—Concord, N. H.	July 12
Aug. 8	Mailing Shed—Ft. Scott, Kan.	July 19
Aug. 8	Water Softening Plant — Annapolis, Md.	July 26
Aug. 8	Reroofing—Chelsea, Mass.	July 26
Aug. 9	Lookout — Port Huron, Mich.	July 19
Aug. 10	Removal of Pile Protection —Chicago, Ill. Adv. July 19 and 26.	July 19
Aug. 10	Lookout—Wheeling, W. Va.	July 19
Aug. 13	Dredging—Baltimore, Md. Adv. July 19 and 26.	July 12
Aug. 13	Stamp Cages—New Orleans, La.	July 19
Aug. 14	Road—Zion National Park (Springdale P. O.), Utah	July 19
Aug. 14	Buildings—Knoxville, Ia.	July 19
Aug. 15	Water Supply — Chealsea, N. Y.	July 26
Aug. 15	Barracks, etc.—San Diego, Calif.	July 26
Aug. 16	Extension—Evanston, Ill. Adv. July 26.	July 26
Aug. 17	Dredging—Massachusetts Adv. July 19 and 26.	July 26
Aug. 22	Dredging—Norwalk, Conn. Adv. July 26.	July 26
Aug. 22	Sub Post Office—Memphis, Tenn.	July 26
Aug. 28	Superstructure—Ludington, Mich. Adv. July 19 and 26.	July 26
Sept. 12	Storage Bins, etc.—Pearl Harbor, H. T.	July 19

MISCELLANEOUS

July 27	Pier—Phila., Pa.	July 19
July 27	Heating & Ventilating Apparatus—Arverne (Far Rockaway P. O.), N. Y.	July 19
July 27	Heating & Ventilating Apparatus—Brooklyn, N. Y.	July 19
July 27	Heating & Ventilating Apparatus — New Brighton, N. Y.	July 19
July 30	Pier Shed — New York, N. Y.	July 19
July 30	Heating and Ventilating, etc. —Lewistown, Pa.	July 19
Aug. 1	Gas Pipe Line—Texas	July 5
Aug. 1	Mechanical & Electrical Equipment—Greensboro, N. C.	July 26
Aug. 1	New Castle, Pa.	July 26
Aug. 3	Concrete Mixer, etc.—Trenton, N. J.	July 26
Aug. 6	Cement, etc.—San Diego, Calif.	July 26
Aug. 7	Heating Work—Syracuse, N. Y. Adv. July 26.	July 26
Aug. 10	Heating Work, etc.—Hudson, N. Y. Adv. July 26.	July 26
Aug. 11	Operating Quarries — Missouri Adv. July 26.	July 26
Aug. 11	Ice Arena—London, Ont.	July 26
Aug. 25	Tunnel—Colorado	July 26
Aug. 31	Cable and Accessories — Melbourne, Australia	June 21
Feb. 28	Headworks — Wellington, New Zealand	May 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. H., Newmarket—Water Comrs. having plans prepared filtration plant for present water system. $50,000-$75,000. Weston & Sampson, 14 Beacon St., Boston, engrs.

N. Y., Fredonia—Plans reservoir at Shumla and laying new main into village. $15,000. A. R. Moore, village clk. Engineer not announced.

N. Y., Gowanda—State plans 6 mi. mains at state hospital, here, also large dam on north branch of Clear Creek in hamlet of

Waterworks (Continued)

Marshfield. $118,000. T. J. Morrison, c/o State Hospital, Gowanda, engr. in charge.

N. Y., Jamestown—Plans election to vote on $150,000 bonds for renewal of mains throughout city. L. O. Bergman, city engr.

N. Y., Jamestown—Bd. Water & Light Comrs. plan 16 in. c.i. main in Harrison St. $50,000. L. O. Bergman, city engr.

N. Y., Niagara Falls—Plans extension to water filter plant, 16 new filters. $200,000. W. Bennett, city engr.

N. Y., Palmyra—Soon takes bids new water system to include concrete reservoir and filtration plant. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs.

Pa., Leighton—Leighton Water Co. plans extension and improvements to its plant and will be open for quotations on electric pumping machinery. $40,000. Engineer not announced.

Fla., Indian River City—Indian River City Town Site Corp. plans complete water system. $25,000. H. F. Williams, c/o Hotel Pines, Titusville, mgr.

Fla., West Palm Beach—Election Aug. 14, to vote on $25,000 bonds for high pressure water and fire systems. K. Riddle, city mgr.

Tenn., Watertown—Plans to erect water plant. $50,000.

O., Ashtabula—Ashtabula Water Co. plans expanding capacity of water system. $150,000. Engineer not announced.

O., Cleveland—See "Streets and Roads."

O., Columbus — See "Streets and Roads."

O., Ironton—Plans extensions to mains. $39,012. L. G. Howell, Ironton, engr.

Ia., Sergeant Bluff—Having plans prepared waterworks system incl. well, 200 ft. deep, 6 in. diameter. $15,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Minn., St. Paul—Voted $2,500,000 bonds for waterworks improvements. G. M. Shepard, city engr. Noted June 28.

Kan., Emporia—Plans 12,000 ft. 20 in. c.i. pipe from filter house to city. R. J. Paulette, city engr.

Kan., Pittsburg—Plans to purchase new water softener. A. Liftmer, supt.

N. D., Ellendale—Plans sinking 1 hard water well $15,000, and drilling 1 artesian well, $10,000. J. King, city clk.

Wyo., Douglas — Aug. 14 to vote on $250,000 bonds for complete new gravity water system from Mountain Springs. F. T. Cummings, city engr. Noted May 18.

Mo., Canton—See "Sewers."

Mo., Greenfield—Plans election to vote on $50,000 bonds extending water mains and installing sewerage system.

Mo., St. James—July 31, to vote on $33,000 bonds for waterworks and distribution system, also $12,000 bonds for sewerage system.

Tex., Dallas—Plans dam. $2,000,000-$5,000,000. E. A. Kingsley, city engr. J. C. Nagle, of Nagle, Witt & Rollins, Courthouse, Dallas, and T. A. Thompson, Wichita Falls, consult. engrs.

Tex., Hubbard—Defeated $50,000 bonds for waterworks improvements. J. C. Mecklin, mayor. Noted June 28.

Tex., Sanger — Voted $55,000 bonds for waterworks, $22,500 sewers, and $17,500 electric light plant. E. L. Dalton, engr., 1915½ Main St., Dallas, preparing plans. Noted June 21.

Tex., Strawn—Making plans waterworks improvements, mains, etc. $50,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Okla., Stillwater — Election about Aug. 14, to vote on $250,000 bonds for new earth dam, spillway, pipe lines, pumping station and machinery. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted May 17.

Wash., Walla Walla—Plans twin reservoirs at city water plant. $210,000.

Calif., Beverly Hills—Voted $400,000 bonds for water system.

Calif., Gilroy—Plans to vote on $90,000 bonds for improvements to water system.

Calif., Ravenswood (Redwood City P. O.)—City and County of San Francisco had plans prepared pumping plant, here, (portion of Hetch Hetchy Project). $17,000. M. M. O'Shaughnessy, City Hall, San Francisco, ch. engr.

Calif., Watts — Conservative Water Co. plans 10 mi. c.i. and screw pipe, new pumps and meters. $150,000.

Que., Metis Beach — Corp. of Beach in market for complete waterworks equipment. Address Mayor, c/o McDougall & Pease, 85 Osborne St., Montreal.

Ont., Carleton Place — Voted $30,000 bonds improving and extending waterworks system, mostly 6 in. c.i. mains. H. Nicholson, Town Hall, clk.

Ont., Haileybury—Town Council plans installing pumping equipment for fire protection, incl. 3 stage centrifugal motor driven pumps. $20,000. H. A. Day, clk.

BIDS DESIRED

N. J., Pennington—Aug. 26, by Boro Council, electrically operated pumping station. Separate contracts may be awarded for building and erection of mechanical equipment. Remington & Vosbury, 601 Market St., Camden, engrs. Noted July 12.

Md., Baltimore—Aug. 1, by Bd. Awards, furnishing and delivering w.i. pipe, couplings and malleable iron fittings for Water Dept. W. A. Megraw, water engr.

W. Va., Wellsburg—Aug. 15, by Water Bd., 2 centrifugal pumps, etc. Hudson & Myron, 808 Wabash Bldg., Pittsburgh, Pa., engrs. adv. this issue.

S. C., Andrews — Aug. 22, c.i. mains, reservoir, filter and transmission lines, etc. $70,000. Ryan Eng. Co., Columbia, engrs.

Tenn., Memphis—Aug. 15, by Bd. Water Comrs. at office Memphis Water Dept., 105-107 North 2nd St., well houses, piping and equipment, etc., Contrs. 22 to 27 inclusive. Fuller & McClintock, 879 North Parkway, engrs.; adv. this issue.

O., Bedford — Aug. 7, about 5 mi. c.i. mains. B. T. Wright, Bedford, engr.

O., Cleveland—Aug. 10, at office of Commissioner Purchases & Supplies, City Hall, main in Lorain Ave. A. V. Ruggles, comr. water.; adv. this issue.

O., Columbus—See "Streets and Roads."

O., Westerville—Aug. 3, by R. Biehl, city mgr., constructing filter plant, 2 contact beds and 2 units to sledge beds, 17,000 lb. reinforcing, 18 tons c.i. pipe and specials, 4,600 lin.ft. 4-30 in. pipe, etc. $31,000. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs.

Mich., Detroit—Aug. 21, by Bd. Water Comrs., 176 East Jefferson Ave. 37 mg. pumping engine. H. S. Starkey, secy.; adv. this issue.

Mich., Detroit—Aug. 1, by Dept. Purchases & Supplies, 700 Marquette Bldg., c.i. manhole frames and covers, c.i. specials, fire hydrants, etc., for Bd. Fire Comrs.

Mich., Monroe—July 30, by F. M. Kressback, city clk., filtration plant equipment at waterworks incl. 4 operating stands, 4 strainer systems, 12 wash water gutters, 53 cu.yd. filter sand, 127 cu.yd. filter gravel, 8 depth gauges, etc. Hoad, Decker Shoecraft & Drury, Ann Arbor, Mich., engrs.

Ill., Bartlett—July 30, drilling artesian well. $50,000. Suhr & Berryman, 105 North Clark St., Chicago, engrs. Noted July 19.

Ill., West Chicago—July 30, by city or E. Hancock, engr., 2007 Ogden Ave., Chicago, mains. $45,000.

Minn., LeSueur Center—Aug. 3, by city new motor-driven deep well pumping unit, pipe and fittings for connection with street main. A. A. Tambornino, clk. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr.

S. D., Flandreau — Aug. 6, waterworks improvements incl. concrete well and brick pumphouse, 400,000 gal. daily capacity. $20,000. Chenoweth, Kennedy & Rettinghouse, Boyce-Greeley Bldg., Sioux Falls, engrs. Noted July 19.

S. D., Watertown—Aug. 29, by A. M. Myhre, secy. Municipal Utilities Comn., filter, pumping and piping equipment within waterworks filter house and pumping station. W. F. Cochrane, city engr.; adv. this issue.

Ark., Ft. Smith—Aug. 1, by D. L. Ford, chn. Ft. Smith Water Works Dist. furnishing and laying 64,000 ft. c.i. pipe. Kiersted & Stringfellow, Interstate Bldg., Kansas City, Mo., engrs.

Tex., Abilene—Taking bids several million gallon daily capacity electric motor driven Booster pump between here and Lake Abilene, to take place of standpipe. H. H. Batjer, city engr.

Tex., Cross Plains—Taking bids complete waterworks system. $50,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Ore., Jennings Lodge—Aug. 15, by H. L. Gilbert, engr., Couch Bldg., Portland, 27,000 ft. lap weld 8 in. pipe, 11,000 ft. 8 in. and 20,000 ft. 6 in. c.i. pipe, 20,000 ft. 4 in. and 90,000 ft. 2 in. steel pipe, 600,000 gal. concrete reservoir, 40,000 gal. tank on concrete base, 150 g.p.m. electric driven pump, for Oak Lodge Water Dist. $200,000.

Calif., San Diego—Aug. 27, by W. H. Cameron, purch. agt., furnishing and erecting 1,200,000 gal. steel stand pipe, incl. towers and foundations, for municipal water distributing system.

BIDS RECEIVED

O., Cleveland—For 973 tons c.i. mains in Superior Ave., 8,000 cu.yd. excav., Contr. 28, from J. T. Martin, B. F. Keith Bldg., $123,000.

O., Cleveland—Piping for main pumping units of Fairmount Pumping Station, from Natl. Valve & Mfg. Co., 3101 Liberty Ave., Pittsburgh, Pa., $66,976.

Que., Montreal—For 6,500 ft. of 48 in. force main in Atwater Ave. and St. Patricks St. east, from Laurin & Leitch Co., 590 Union Ave., $157,725.

CONTRACTS AWARDED

Pa., Dubois—Rein.-con. reservoir, 165 ft. inside diam., 16 ft. high, 500 ft. of 12 in. terra cotta pipe, etc., to C. Hatten & Co., Dubois, $78,500. Noted June 14.

O., Bedford—For 5 to 6 mi. of 6 and 8 in. c.i. mains, to Gantose Constr. Co., Columbia Bldg., Cleveland, $140,000.

O., Bellaire—See "Streets and Roads."

O., Columbus—See "Streets and Roads."

O., Youngstown—See "Sewers."

Wis., Milwaukee—Two 100 kw. Uniflo engines and generators for Riverside Pumping Station, to Ames Iron Wks., 25 East 2nd St., Oswego, N. Y., $16,250. Noted July 12.

Wis., Oshkosh—For three thousand five hundred ⅝ in. water meters, to Gamon Meter Co., 282 South St., Newark, N. J., $9 each.

Wis., Park Falls—Water supply, incl. 3 test wells and pumping equipment, to Layne & Bowler Co., 37 West Van Buren St., Chicago, $18,000.

Ia., Dubuque — To Dayton-Dowd Co., Quincy, Ill., 2 centrifugal pumps $5,270 and $3,810 respectively; to F. H. Dormer, 548 Milwaukee St., Milwaukee, venturi meters $2,550; to Swords Bros., Rockford, Ill., switchboards $2,625; to Sullivan Mchy. Co., 124 South Michigan Ave., Chicago, air lift equipment $5,580, 2 motor driven compressors $30,741.

Minn., Stewart—For 60,000 gal. elevated steel tank, to Minneapolis Steel & Mchy. Co., 2854 Minnehaha Ave., Minneapolis, $5,000. Noted May 24.

N. D., Casselton — For standpipe, pump and portion of distribution system, also portion sewerage system, to Haggart Constr. Co., Fargo, $55,669. Noted April 26.

Mo., Kirksville—Valves and hydrants, to Ludlow Valve Mfg. Co., 1416 R. A. Long Bldg., Kansas City, $8,334; filter equipment, to E. W. Bacharach & Co., 616 Rialto Bldg., Kansas City, $7,667.

Mo., Kirkwood—Treating plant for waterworks, to St. Louis Foundation Co., Fullerton Bldg., St. Louis, $18,700.

Mo., Lathrop—See "Sewers."

Ark., Van Buren—Filtration plant, new pump house and laying mains, to Ajax Constr. Co., Oklahoma City, and J. S. Terry, Poteau, Okla., $67,911.

Ark., De Queen—Waterworks extension, to Ladd Constr. Co., Kansas City, $45,014.

Tex., Ft. Worth—Waterworks system for Polytechnic Heights, booster plant and machinery to A. M. Lockett Co., Magnolia Bldg., Dallas, $14,897; mains to H. W. Greenway, 214 Hemphill St., $71,036. Noted June 21.

Okla., Woodward—Waterworks system, general contract to Tibbets & Pleasant, 229 North Nogales St., Tulsa, $40,000; foundations to W. C. Ward, Woodward, $7,000; wells to Well Wks. Mfg. Co., Garden City, $7,000; pipe to U. S. Cast Iron Pipe & Fdry. Co., 604 Interstate Bldg., Kansas City, Mo., $84,000; valves to Ludlow Valve Co., 1416 R. A. Long Bldg., Kansas City, Mo., $2,000; 1 m. g. steel storage tank to Chicago Bridge & Iron Wks., 608 South Dearborn St., Chicago, $18,250. Noted June 72.

Calif., Los Angeles—Pub. Serv. Comn., to Amer. Cast Iron Pipe & Fdry. Co., Los Angeles, and Balboa Bldg., San Francisco, under Specification 676 C. Class B pipe, bell and spigot ends, as follows: 7,501 pieces 4 in., 16 ft. lengths at $67.74 per ton, 1,500 pieces 6 in., 16 ft. lengths $63.74, 450 pieces 8 in. and 650 pieces 12 in., 12 ft. lengths $62.74; Specification 677 C, Class B c.i. pipe, bell and spigot ends, delivered Aqua Siding, 750 pieces 12 in., 12 ft. lengths $62.24, 1,014 pieces 6 in., 5 meter lengths $63.24, 4,000 pieces 4 in., 12 ft. lengths $66.24; delivered Van Nuys 440 pieces 12

Waterworks (Continued)

in. and 250 pieces 8 in., 12 ft. lengths $62.14, 863 pieces 6 in., 5 meter lengths $63.14, 3,450 pieces 4 in., 12 ft. lengths $66.14, 375 pieces 6 in., 5 meter lengths $65.74, 1,000 pieces 4 in., 12 ft. lengths $68.74. Noted May 31.

Sewers

PROPOSED WORK

N. Y., Binghamton—Plans Trout Brook trunk line sewer. To exceed $25,000. W. E. Weller, city engr.

N. Y., Snyder—C. Burkhardt Co. plans 4 mi. sewers in Audubon Terrace. To exceed $25,000. Engineer not announced.

N. J., Bloomfield — See "Streets and Roads."

N. J., Westville—Boro Council plans new sewers. $170,000. C. W. Letzgus, 509 Market St., Camden, boro solicitor.

Pa., Lewistown—Election in November to vote on $100,000 for sewers in 4th, Dorcas, Hale and Walnut Sts., and paving Pine and Spruce Sts. H. C. Burkett, pres. Boro. Council.

La., Minden—Making plans sanitary sewerage system. $105,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Ohio—Summit Co. (Akron) authorized E. L. Barstow, engr., County Bldg., Akron, to make surveys and estimates for 8 mi. sewers in Sawyerwood, Lakemore and North Springfield. $300,000. County will advance money, and collect from benefited property owners.

O., Cleveland—See "Streets and Roads."

O., Columbus—Franklin Co. soon takes bids 6-18 in. vitr. sewers in Sewer Dist. Marion 2, North Whittier Gardens Area. $51,029. E. G. Bradbury, 262 South High St., co. engr.

Ill., Granite City—Preparing plans 6-12 in. lateral sewers in Dist. 2. $65,000. W. W. Kerch, 1st Natl. Bank, engr.

Minn., St. Paul—Voted $3,000,000 bonds for sewer extensions and repairs. G. M. Shepard, city engr. Noted June 28.

Mo., Canton—Plans sewerage system and waterworks improvements. To exceed $25,000. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs.

Mo., Greenfield—See "Waterwork."

Mo., St. James—See "Waterworks."

Ark., McGehee—Making preliminary survey sanitary and storm sewerage system. $85,000-$100,000.

Tex., Sanger—See "Waterworks."

Wash., Seattle — Plans 3 septic tanks. $50,000. W. D. Barkhuff, supt. of streets and sewers.

Calif., Beverly Hills—Voted $140,000 bonds for sewers and treatment plant.

Calif., Eureka—Plans election to vote on $25,000 bonds for extensions to sewerage system.

Calif., Orange — Will vote on $200,000 bonds to finance city's portion of cost for sewage disposal system to be undertaken by cities of Anaheim, Fullerton, Santa Ana and Orange.

Calif., Pasadena—City cancelled contract for sewers in Dist. 7, due to errors in proceedings. New proceedings will be started immediately. Noted July 5.

Calif., San Bernardino—Plans deep sewerage system. To exceed $50,000. C. E. Johnson, city engr.

Calif., Santa Paula—Aug. 7 to vote on $150,000 bonds which includes $90,000 for sewerage system, etc. City Hall is also planned.

Ont., Hamilton—Takes bids about middle of August, sewers in Sterling St. $58,000. W. L. McFaul, City Hall, engr.

Ont., London—Having plans prepared extensions to sewers. $300,000. W. P. Near, City Hall, engr.

BIDS DESIRED

N. Y., Brooklyn—Aug. 1, by E. Riegelmann, boro pres., Boro Hall, sewers in Mansfield Pl., Lenox Rd., Aves. T and L, East 3rd, East 35th, 73rd, East 52nd, 81st, 51st, 82nd, 79th, 81st, East 26th and 58th Sts., 7th, 20th, 23rd, and Lott Aves., Fort Hamilton Parkway between 67th and 68th Sts., and Fort Hamilton Parkway between 45th St. and New Utrecht Ave.

N. Y., Long Island City—July 31, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewer in 25th St.

N. Y., St. George — See "Streets and Roads."

New Jersey — Sept. 11, by State Hy. Comn., Trenton, highway bridge with its approaches, over Raritan River, between Perth Amboy and South Amboy. W. G. Sloan, state highway engr. C. W. Hudson, superv. engr.; adv. this issue. Noted May 25, 1922 under "Perth Amboy."

N. J., Haddonfield — Aug. 16, by Boro Comrs., Boro Hall, sanitary sewerage system and sewage pumping station, etc. Remington & Vosbury, 601 Market St., Camden, engrs.; adv. this issue.

N. J., Millville—Aug. 10, by Bd. City Comrs., City Hall, West Millville sewage pumping station, South Millville pumphouse and 10 in. c.i. force main under Maurice River, N. B. Wade, city engr.; adv. this issue.

N. J., Ridgefield Park—July 31, sludge drying beds at East Side and West Side sewage treatment plants. A. J. Provost, Jr., 39 West 38th St., New York City, consult. engr.

Md., Baltimore—Aug. 1, by Bd. Awards, drains and sewers in Dist. 38-C, Sanitary Contr. 204, 6,000 lin.ft. 6-24 in. drains and sewers, $40,000; Gwynn Falls intercepting sewer, Sect. 3, $50,000. B. L. Crozier, highway engr.

Md., Baltimore—Aug. 8, by Bd. Awards, City Hall, constructing sludge digestion tanks 24, 25 and 26, and sludge drying beds 9 and 10 at Baltimore Sewage Treatment Wks. S. Purcell, ch. engr.; adv. this issue.

Pa., Lewistown—Aug. 2. 6,300 ft. vitr. pipe sewer in Wayne and Grand Sts. $25,000. Former bids rejected. Banks & Craig, Telegraph Bldg., Harrisburg, engrs. Noted June 21.

W. Va., Spencer—Aug. 24, by State Bd. Control, Charleston, intercepting sewer and branches. C. E. Collins, Drexel Bldg., Phila., consult, engr.; adv. this issue.

S. C., Andrews—Aug. 22, 22,000 ft. 8 and 12 in. terra cotta sewers, disposal plant, etc. $30,000. Ryan Eng. Co., Columbia, engrs.

O., Bedford—Aug. 7, about 1 mi. 10 and 12 in. vitr. tile sewers. B. T. Wright, Bedford, engr.

O., Columbus—July 31, by W. H. Duffy, dir. Pub. Serv., 28,593 ft. 6-24 in. vitr. sewer in Wilson Ave. to Ohio Ave. extending over several streets and alleys. $50,478.

O., Columbus—See "Streets and Roads."

O., Delaware—Aug. 3, by W. H. Duffy, dir. Pub. Serv., Columbus, sewage disposal plant, at Girls Industrial Home, here, $150,000. Former bids rejected. C. B. Hoover, 252 17th Ave., Columbus, engr. Noted July 5.

O., Euclid—Aug. 6, storm and sanitary sewers in Lake Shore Blvd., East Miller and Euclid Aves., Upson, Johnson, Cut and Chardon Rds. To exceed $100,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ill., Chicago — July 31, by Bd. Local Impvts., 207 City Hall, sewerage system in South Park Ave., 114th Pl. and 115th St., etc., $174,000, 89th St. Sewer and replacement of sewer in Western Ave. $38,000. C. H. Hill, ch. engr.

Ia., Burlington—July 31, sewage disposal plant, one Imhoff tank, sprinkling filter, sludge bed and ejector station. $30,000. M. G. Hall, Centerville, engr. H. A. Vollmer, city engr.

Ia., Des Moines—Aug. 2, by City Council at office A. E. McGlothen, clk., Southwest Sewerage System. Adv. this issue. Former bids rejected. Noted July 12.

Mo., Maplewood (St. Louis P. O.)—Aug. 1, by G. D. Komar, city clk., City Hall, 15,640 ft. 8-36 in. vitr. clay and 500 ft. 42 in. segmental block sewer in Manchester Sewer Dist. 2. $97,996. A. H. Beard, Title Guaranty Bldg., St. Louis, engr. Noted July 5.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., July 19, sewers in 25th and 27th Sts., from F. J. Kelly Co., Inc., 186 Joralemon St., Brooklyn, A $368,581; Awixa Corp., Mt. Vernon, B $313,047. Noted July 12.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in (1) Olmstead Pl. (2) Matthews Ave. (3) Randall Ave. (4) Pelham Parkway, excavating and removing existing sewer in (5) Exterior St., from C. E. Farrell Contg. Co., 1981 Pilgrim Ave., (1) $7,805; McDonald & Wilson, (2) $12,431 (3) $6,848 (4) $14,560; F. Henretti, (5) $7,200. Noted July 12.

N. J., Bloomfield—J. C. Johnson, town clk., July 2, 5,000 lin.ft. 8 and 10 in. sanitary sewer in Myrtle Ave., 850 lin.ft. 8 in. sewer in Franklin Ave. and 250 lin.ft. 8 in. sewer in Parkway west, from Paterson Contg. Co., Paterson, $13,140, $598 and $815 respectively; 1,500 lin.ft. 12 in. sewer in Mill St., paving 900 sq.yd. Ferramiale Ave., also curbing and paving 1,700 sq.yd. Fulton St., asphalt penetration telford, from A. Lamparillo, 67 Glen Ridge Ave., Montclair, $4,795, $2,043 and $5,015 respectively; 575 lin.ft. 8 in. sewer in Weaver Ave., from P. D'Amato, 224 Washington Ave., Newark, $1,675; paving 600 sq.yd. Vesper Pl. and 700 sq.yd. Fontaine Ave., asphalt penetration telford, from J. R. Fresco, Montclair, $1,421 and $1,624 respectively; curbing and paving 2,500 sq.yd. Race St., asphalt penetration telford, from R. Doriety, 168 Ridge St., Newark, $10,694.

Ky., Louisville—Napoleon Blvd. sewer and drain and Speed Ave. Laterals "South," 10,920 ft. 8-36 in. pipe, from H. Bickel Co., 433 Garden St., $110,953. Noted June 28.

Wis., Milwaukee — Sewerage Comr., 508 Market St., regulating and by-pass chamber, Muskego Ave., 140 ft. double section concrete sewer, etc., in Florida, South Water and Grove Sts., etc., from Prange-Ferebee Constr. Co., 37th Ave. and Burnham St., $123,315; 3,271 lin.ft. 96 in. storm sewer tunnel, Schiller and Jordan Sts., Howell and Oklahoma Aves., from H. Hohensee, Ludington Ave., Wauwatosa, $227,192.

CONTRACTS AWARDED

N. Y., Syracuse—Bd. Contr. & Supply 1,525 ft. 10 x 11 ft. concrete and rein.-con. storm sewer in Erie Canal from Clinton to Salina Sts., to J. Young, 620 South Salina St., $100,000. Noted July 5.

N. J., Plainfield — See "Streets and Roads."

Md., Linthicum Heights—Anne Arundel Sanitary Comn., (1) 3,200 ft. 6 in., 2,506 ft. 8 in. and 3,359 ft. 10 in. vitr. clay sewers, Contr. 1-S, (2) 1,191 ft. 6 in., 15,889 ft. 8 in. and 1,682 ft. 10 in. vitr. pipe sewers, Sanitary Dist. 2-S, to P. Agrios, 3641 13th St., Wash., D. C., (1) $20,083 (2) $30,952. Noted July 5.

N. C., Rutherfordton—Sewerage disposal plant, to Elliotte Building Co., Hickory, $62,635; paving to Geer & Wilson, Rutherfordton, $23,000. Noted July 5.

O., Cleveland—For 2,661 ft. 12-24 in. vitr. tile sewer in Catalpa Rd., to Yahya Bros., 591 Bway. Rd., $13,613; 1,135 ft. 5 ft. 9 in. and 765 ft. 5 ft. 6 in. circular "E" sewer in East 141st St., to G. Darwich, 9214 Kempton Ave., $38,738. Noted July 19.

O., Cleveland—Cuyahoga Co., 4,000 ft. of 27 x 33 egg shape outfall sewer in Ridge Rd. Impvt. 20, Sect. C of Co. Sewer Dist. 1, to Manson Co., c/o Sewer Contractors' Exch., The Arcade, $56,530. Noted July 12.

O., Cleveland Heights (Warrensville P. O.)—for 8,640 ft. 12-20 in. vitr. tile sewer in Washington Blvd., to Consolo & Palermo, Berwood Ave., Cleveland, $28,952; 2,745 ft. 36, 42 and 48 in. segmental block and 6,070 ft. 8-18 in. vitr. tile sewer in Taylor Rd., to Salem George Bros., Erie Bldg., Cleveland, $50,000.

O., Columbus—See "Streets and Roads."

O., Youngstown—Mahoning Co., 5¼ mi. sewers and 2¼ mi. water mains in Brookfield Twp. Sanitary Sewer Dist. 2, to Turner Contg. Co., Park Theatre Bldg., $100,118. Engrs. est. $108,500.

N. D., Casselton—See "Waterworks."

Mo., Lathrop—Sewerage and water system, to Burt & Tripp, Hutchinson, Kan., $101,309. Noted June 28.

Ark., De Queen—Sewerage system, to Campbell & Heinght, Dallas, Tex., $42,314.

Calif., Pasadena—For 8-20 in. vitr. sewers in portions of West Ave., Ontario St., etc., to Downer & Mero, 2234 Macdonald Ave., Richmond, $58,000.

Ont., Ford—Sanitary sewers in Drouillard and Pilette Rds., to Merlo, Merlo & Ray, Sandwich St., $97,200. Prices wanted on materials. Noted June 21.

B. C., Point Grey—Vitr. sewers in various streets, to D. W. Johnson, 3615 10th Ave. W., Vancouver, $42,805.

Waste Disposal

PROPOSED WORK

Calif., Beverly Hills — Voted $25,000 bonds for incinerator.

BIDS DESIRED

Pa., Johnstown—July 31, by City Council, improving garbage disposal plant, 900 cu.yd. excav., 401 sq.yd. brick paving, 250 lin.ft. grouted cobble gutter, 1 rein.-con. re-

Waste Disposal (Continued)

containing wall and 1 grate inlet. H. L. Opperman, supt. H. L. Wilson, 184 Worth St., engr.

CONTRACTS AWARDED

Wis., West Allis—Garbage incinerator to Nye Odorless Crematory Co., Georgia Life Bldg., Macon, Ga., $22,500. Noted Apr. 26.

Bridges

PROPOSED WORK

Mass., Boston—City plans bridge and draw for vehicles and pedestrians, Congress St. $800,000. J. E. Carth, city engr.

Pa., Johnstown — City plans 168 ft. through plate girder span and 175 ft. through truss span, 24 ft. roadway, two 8 ft. sidewalks, Conemaugh St. $100,000. M. L. Greiner & Co., 985 B, Union Arcade, Pittsburgh, engrs.

La., New Orleans—See "Miscellaneous."

Mich., Alpena—Making preliminary plans 175 ft. steel truss bridge 32 ft. wide, on 9th St. over Thunder Bay River. L. Gram, Eng. Bldg., Detroit, engr.

Wis., Milwaukee—Making plans 1,400 ft. plate girder viaduct incl. trunnion double leaf bascule, on Holton St. $950,000. M. C. Cutler, City Hall, engr.

Okla., Guthrie—Logan Co. election Aug. 10, to vote on $100,000 bonds for 480 ft. steel bridge, 3 truss spans, pile foundation, concrete piers, 1 mi. north of here. H. J. Wilkins, co. engr.

Wash., Tacoma—City and Pierce Co. plan bridge over Hylebos Waterway to replace present inadequate structure. J. C. Manley, city engr. C. H. Votaw, co. engr.

California—State Hy. Dept., Sacramento, plans 6 structures on highway between Red Bluff and Los Molinas, Tehama Co. State will defray cost of constructing above, if Tehama Co. will pay ⅓ cost of building Cottonwood Bridge which will cost $85,000. R. M. Morton, state highway engr.

Calif., Santa Barbara—Santa Barbara Co. plans bridge over Santa Ynez River on highway between Lompoc and Harris Station. To exceed $50,000.

Ont., Goderich — Huron Co. plans concrete culverts and bridges, 1,600 cu.yd. concrete. $35,000. T. R. Patterson, Goderich, engr.

Ont., Kitchener—See "Streets and Roads."

BIDS DESIRED

Vermont—See "Streets and Roads."

Conn., Forrestville—Aug 7, by City Clerk of Bristol, 75 ft. 3 span concrete girder bridge over Pequabuck River, here. $45,000. C. W. Buell, 175 Main St., Bristol, engr. Noted June 14.

Mass., North Adams—Aug. 6, by J. L. Temple, comr. pub. wks., City Hall, bridge over Hoosac River; adv. this issue.

New York—July 30, by G. A. Whalen, comr. Plant & Structures, Municipal Bldg., New York City, piers for bridge over North Channel, Jamaica Bay Blvd., Queens Boro.

New York—Aug. 3, by Committee on Bridges at office of C. MacDonald, engr. Westchester Co., Court House, (White Plains), completing Van Cortlandt Bridge over Croton River, on Albany Post Rd. between towns of Cortlandt and Ossining; adv. this issue.

New Jersey—Aug. 13, by State Hy. Dept., Trenton, steel and concrete bridge having two 73 ft. spans, 30 ft. roadway and 8 ft. extension, incl. temporary pile trestle and rein.-con. slab over Crosswicks Creek, M. P. 26.5, Route 2, Sect. 5, Mercer and Burlington Counties. $118,330. J. L. Vogel, 772 Broad St., Newark, engr.

Maryland—July 31, by State Rds. Com., Baltimore, bridges in Frederick and Garrett Co., Contrs. F-65 and G-26. J. N. Mackall, chn.; adv. this issue.

W. Va., Clarksburg—See "Streets and Roads."

W. Va., Clendenin—Aug. 17, by Comrs. Kanawha Co., (Charleston), bridge over Elk River, here. R. N. Moulton, co. clk.; adv. this issue.

S. C., Walterboro—See "Streets and Roads."

Ga., Waycross—Aug. 3, by State Hy. Dept., at East Point, 2 concrete bridges, 575 lin.ft. long, on Waycross-Pearson Highway, for Ware Co. C. L. Rhodes, Waycross, engr.

Ga., Waycross—Aug. 3, by C. L. Rhodes, engr., Waycross, 2 concrete bridges, 312 ft. long, on Waycross-Valdosta Highway, Ware Co.

Fla., Allenhurst — Aug. 17, by Comrs. Brevard Co., (Titusville), concrete and steel bridge across Hanlover Canal, here, one 55 ft. clear opening. $26,000.

Fla., Clearwater — Aug. 23, (change of date), by Bd. Comrs. Pinellas Co., 7 concrete deck girder bridges, 10 concrete flat slab and 1 creosoted timber, built in connection with 25 ft. single leaf steel lift span, etc. C. E. Burleson, co. engr.; adv. this issue. Noted July 12.

Fla., Daytona—Aug. 6, by Comrs. Volusia Co., (De Land), creosoted wood bridge across Halifax River, here, one 55 ft. draw span, 150 ft. stone wall and embankment fill. $60,000. C. M. Rogers, Daytona, engr.

Louisiana—Aug. 14, by State Hy. Dept., Baton Rouge, 810 lin.ft. concrete pile trestle divided into 7 structures varying from 76 to 174 ft., substructure consists of 4 pile concrete bents either precast or cast in place concrete piles, superstructure consists of rein.-con. deck girders approximately 22 ft. spans, on Federal Aid Project 116, Sect. D, Minden-Shreveport Highway, Webster Parish. J. M. Fourmy, state highway engr.

Ohio—July 31, by Dept. Highways and Pub. Wks., Columbus, concrete arch bridge on Sect. B-2 Mt. Vernon-Newark Rd., Knox Co. $31,000. A. V. Donaheys, dir. highways.

O., Cincinnati—See "Streets and Roads."

Wyo., Rawlins—Aug. 4, by Clerk Carbon Co., 102 ft. steel span bridge, 18 mi. north of Hanna. $25,000. D. West, chn. co. comn.

Calif., Ventura—Aug. 8, by Supervs. Ventura Co., rein.-con. pipe trestle bridge, seven 30 ft. spans rein.-con. girders and deck, on rein.-con. pile bents, over Calleguas Creek, on Coast State Highway. C. Petit, co. surv.

Calif., Yreka—Aug. 6, by Supervs. Siskiyou Co., two curve chord riveted Warren 60 ft. steel span bridges, concrete foundations, one over Scott River on Patton Lane, other over east fork of Scott River. A. F. Parrott, co. surv.

BIDS RECEIVED

Rhode Island—State Bd. Pub. Rds., July 18, bridge at River Point, from T. J. McCusker, Phenix, $31,250. Noted July 12.

New Jersey—See "Streets and Roads."

Wis., Milwaukee—Dept. Pub. Wks. steel structure, double leaf trunnion bascule bridge on State St., superstructure from Milwaukee Bridge Co., 1400 34th St., $224,768; substructure from E. E. Gillen Co., 288 East Water St., $227,900. Noted July 19.

CONTRACTS AWARDED

N. J., Englishtown — Monmouth Co. (Freehold) Bridge Mn-30, Water St., here, to O. J. Melee, 72 Branchport Ave., Long Branch, $22,318. Noted June 21.

Pa., Phila. — Delaware River Bridge Joint Comn., to American Bridge Co., 71 Bway., New York City, 2 anchorage cable bents of bridge over Delaware River connecting Phila. and Camden, N. J., Contr. 7, 2,030,000 lb. silicon steel $0.093, 650,000 lb. carbon steel $0.093, 950,000 lb. cast steel $0.117, 200,000 lb. steel supports for bents $.081, total $376,590. Noted June 28.

North Carolina — State Hy. Dept., Raleigh, rein.-con. bridges and culverts on State Project 141, Edgecombe and Halifax Counties, to J. A. Peterson, Wadesboro, $72,474; State Project 213, Craven Co., to Eagle Eng. Co., New Bern, $55,418; State Projects 189, 230 and 293, Green, Pitt and Wilson Counties, to Pub. Serv. Production Co., Terminal Bldg., Newark, N. J., $58,295; State Project 836, Henderson Co., to W. M. Brown & Co., Sylva, $92,092; State Project 702 B, Alleghany Co., to Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., $28,265; State Project 672, Rowan Co., to J. A. Kreis, 307 Burwell Bldg., Knoxville, Tenn., $29,918. Noted July 12.

Miss., Houston—See "Streets and Roads."

Ky., Owensboro—See "Excavation, Drainage, Irrigation."

Ia., Orange City—Sioux Co., 1 pony truss to E. Landsman, Everly, $15,893; 1 pony truss to Jensen Constr. Co., Kimballton $9,500; 13 culverts and extensions, to J. Brandsma, Sibley, $4,510.

Missouri—State Hy. Dept., Jefferson City, eleven 20 ft. rein.-con. slab spans over overflow Grand River, also two 150 ft. steel truss, four 40 ft. rein.-con. deck girder, and two 20 ft. rein.-con. slab spans, etc., over Grand River, Daviess Co., to Western Bridge Constr. Co., 750 Peters Trust Bldg., Omaha, Neb., $17,295 and $61,519, respectively; three 20 ft. rein.-con. slab spans over Pine Run Creek, and one 120 ft. steel truss span over Railey Creek, to M. E. Gillioz, Monett, $5,395 and $14,652 respectively, one 50 ft. steel truss span over Spring Creek, Dent Co., to General Constr. Co., Syndicate Trust Bldg., St. Louis, $7,841; one 75 ft. steel truss and four 20 ft. rein.-con. slab spans over Muddy Creek, five 20 ft. rein.-con. slab spans, etc., Barton Co., to Carterville Constr. Co., Carterville, $23,977; four 80 ft. steel truss spans, etc., over Salt River, to Pan Amer. Bridge Co., Moberly, $36,170; cleaning and repainting steel work on two 200 ft. and two 120 ft. steel truss spans, St. Louis Co., to St. Louis Foundation Co., St. Louis, $1,300. Noted July 19.

Washington—State Hy. Comn., Olympia, 2 bridges, each with 150 ft. half through concrete arch, over Hamma Hamma River, to Colonial Bldg. Co., Hutton Bldg., Spokane, 215,000 steel reinforcing bars $0.07, 22,400 steel castings $0.15, 560 cu.yd. Class A concrete $32, 550 cu.yd. Class B $30, 392 cu.yd. Class E $29, etc., total $77,838; bridge over Yakima River near Fallon, Benton Co., two 180 ft. through riveted steel spans with concrete deck and two 30 ft. concrete approaches, to C. H. Graves, Spokane, 450,000 lb. steel $0.084, 44,500 steel bars $0.55, 875 cu.yd. earth approach and fill $3.60, total $55,945. Noted June 28.

Ont., Toronto—Provincial Dept. Pub. Highways, 110 University Ave., 700 ft. bridge, 60 ft. wide, concrete abutments, over Humber River on Dundas St., concrete to Johnston Bros., Brantford, $292,000; steel to Dominion Bridge Co., Imperial Life Bldg. Engrs. est. $500,000. Noted May 24.

Dams

PROPOSED WORK

N. Y., Gowanda—See "Waterworks."

Tenn., Lawrenceburg — Aug. 3, to vote on $80,000 bonds for another dam and power plant on Shoal Creek, between present dam and power plant.

Tex., Ballinger — Coke Runnels Water Impvt. Dist. 1 plans election in August to vote on $4,500,000 bonds for 2,000 ft. dam, 100 ft. high, 200,000 acres to be irrigated. C. C. Holder, Bronte, engr.

Ont., London—Utilities Comn., Hydro Bldg., plans rebuilding cement dam wrecked by flood. $150,000. E. V. Buchanan, Hydro Bldg., engr.

BIDS DESIRED

Calif., Merced—Merced Irrigation Dist., receiving bids Exchequer Dam, 310 ft. high, 900 ft. long on top, over 12 ft. thick at top and over 127 thick at base, Jorgenson type, slightly modified. $3,000,000-$4,000,000. Starr-Thebo & Anderton, Sharon Bldg., San Francisco, engrs. R. C. Starrett, resident engr.

CONTRACTS AWARDED

N. Y., Beacon—City Council, 525 Main St., dam at Melzingah Reservoir, to Newburgh Building & Supply Co., 488 Bway., Newburgh, $168,319. Noted July 5.

Railways

PROPOSED WORK

Michigan—Detroit Connecting Ry., 1526 Dime Bank Bldg., Detroit, plans 88 mi. electric line from Delray connecting Ecorse, Pontiac, Sylvan Lake Village, Mt. Clemens and Marine City. G. H. Kimball, Sr., Pontiac, ch. engr.

Wisconsin—Wisconsin Southern Ry. Co., 53 15th St., Fond du Lac, plans railroad system from Madison to Sturgeon Bay. $2,000,000. C. D. Smith, pres. Engineer not selected.

Oregon—See "Miscellaneous."

Canada—Dept. Pub. Wks., Railways and Canals, Ottawa, plans following supplementary work, Hudsons Bay Railway from Le Pas, Man., to Port Nelson, $350,000; survey of new railway into Peace River Dist., Alberta, $50,000. W. A. Bowden, chn. engr.

Ontario—Ontario Hydro Power Comn., University Ave., preparing plans new belt line, extensions and general rebuilding of system in Windsor and Walkerville. $900,000. Work will be done under supervision of T. U. Fairlie, engr., Border St. Ry. offices, Windsor. Interested in prices of rails and equipment. A. Beck, London, chn. Noted Apr. 5.

Railways (Continued)

BIDS DESIRED

Florida — See "Miscellaneous, under Miami."

CONTRACTS AWARDED

Alabama—Tennessee Coal & Iron R.R. Co., Brown-Marx Bldg., Birmingham, 6 mi. line from Fairfield to Wenonah, incl. grading, bridging and track laying, 130,000 cu. yd. earth excav., 700,000 cu.yd. slag fill, 20,000 cu.yd. slag ballast, 1,600 ft. steel bridges, 100 lb. rails, 24,000 cu.yd. concrete. $4,000,000. Large portion of work will be done by company forces. Contracts will be let for certain units. Address J. B. McYntise, Fairfield, ch. engr.

Excavation, Drainage Irrigation

PROPOSED WORK

Calif., Carmel—See "Miscellaneous."

Calif., Oakdale—Oakdale Irrigation Dist. to vote on $300,000 bonds for concrete pipe, deepening canals, and replacing steel pipe lines.

Ont., Harriston—Minto Twp. soon takes bids drainage work as follows: Drain 1, 25,800 cu.yd. excav.; Drain 11, 17,422 cu.yd. excav.; Drain 12, 6,450 cu.yd. excav., and 3,550 lin.ft. tile drains. $30,000. W. D. McLenna, clk.

BIDS DESIRED

Wis., Green Bay—Foeller, Schober & Stephenson, archts., Nicollet Bldg., taking bids on excavation for 4 story and basement, brick and concrete, plain foundation, for Y.M.C.A. % A. F. Grim, secy., Minahan Bldg. Noted July 19 under buildings.

Minn., Worthington—Aug. 3, by C. J. Kall, aud. Nobles Co., Consolidated Judicial Ditch 1, 21,900 lin.ft. open ditch, 139,365 cu.yd. excav. $19,511; waste bank leveling $2,250; 3 flood water inlets $600; 36,400 lin.ft. 6-28 in. tile $21,909.

Tex., Harlington—Aug. 1, by Cameron Co. Water Impvt. Dist. 1, 15 mi. drainage ditch. $25,000

Que., St. Emelie — July 27, by R. C. Desrochers, secy. Dept. Pub. Wks., Ottawa, dredging here.

CONTRACTS AWARDED

Miss., Charleston—For 474,000 cu.yd. excavating and channel work, to N. C. McGinnis & Co., Exch. Bldg., Memphis, Tenn.

Miss., Corinth—White Oak and Hatchie D. D. of Tippah and Alcorn Counties, 246,327 cu.yd. drainage canals, to McWilliams Co., Inc., Exch. Bldg., Memphis, Tenn., $0.112 per cu.yd., total $27,589. Noted July 28.

Ky., Owensboro—Davies Co. D. D., 250,556 cu.yd. earthwork, 54 acres clearing, one 14 x 16 ft. and one 14 x 30 ft. wooden bridge, one 12 x 85 ft. concrete and steel, wood floor bridge, one 12 x 36 ft. and one 65 ft. concrete and steel bridge, 197,314 cu.yd. excav., to J. D. Church, Owensboro. Noted July 12.

Calif., Merced—A. L. Cowell, secy. Merced Irrigation Dist., to J. Phillips, 637 Santa Ray Ave., Oakland, earthwork in Lingard Lateral $0.17 per cu.yd., total $10,371, Lateral 9, $0.17, total $10,429. Noted June 28.

Streets and Roads

PROPOSED WORK

Conn., Bristol—School Bd. plans grading around new high school, also tennis courts, sidewalk, etc. $25,000.

N. Y., Lakewood—Plans paving Chautauqua Ave. and Terrace St., various types material. $25,000. Engineer not announced.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., received no bids July 23, repaving Metropolitan Ave. and Sheridan Blvd., sheet asphalt; grading, curbing and laying sidewalks, etc., on Beach 92nd St. Noted July 19.

N. Y., Tonawanda—Plans repaving Main St. $70,000. C. S. Warren, mayor.

N. J., Bloomfield—J. C. Johnson, town clk., soon takes bids paving 2,500 sq.yd. Race St., 8 in. penetration macadam, $12,000; laying sidewalks and paving State St. 2 in. bituminous concrete on 6 in. concrete, $10,000; blue stone curbing 1,300 ft. Bay Ave., $2,700; storm sewer in 1,000 ft. East Passaic Ave., $2,500. E. Baechlin, town engr.

N. J., Trenton—Plans paving Liberty St., granite block between car tracks and sheet asphalt from tracks to gutter. $80,000. J. E. English, City Hall, engr.

Pennsylvania—State Hy. Dept., Harrisburg, plans 275 mi. durable highway. $15,000,000 available. The 275 mi. program will exhaust all present funds for construction purposes. There can be no additional road construction during 1923 and 1924 unless voters in November approve $50,000,000 bond issue. P. D. Wright, secy.

Pa., Elwood City—Plans paving 2nd St., Hillside and South 2nd Aves., brick on concrete. $36,000. A main, Boro Bldg., engr.

Pa., Farrell—Plans paving Hamilton Ave., Franch, Union, Washington, Federal and Kishon Sts., various materials. $25,000. Engineer not announced.

Pa., Franklin—Venango Co. plans election to vote on $500,000 bonds for constructing new roads. Engineer not announced.

Pa., Lewistown—See "Sewers."

Pa., Pittsburgh—Plans grading, paving and curbing Kleber St. from California Ave. to Brighton Rd. $29,000. F. W. Lyons, city engr.

Pa., Pittsburgh—Plans grading, paving and curbing Baker St. from Morningside to Butler Sts. $92,000. F. W. Lyons, city engr.

Pa., Pittsburgh—Plans grading, curbing and paving St. Martin St. from Birmingham to Monastery Sts., 3,690 sq.yd. blockstone and brick, 7,169 cu.yd. excav., etc., $46,000; grading, regrading, paving, repaving, curbing and recurbing and improving storm sewers in Arlington Ave. from South 26th St. to Clover St., $195,000; repaving, asphalt concrete base on Rosedale St. from Hamilton to Hill Aves., $25,000; grading, paving, curbing and storm sewers in Los Angeles Ave. from Shiras to Mackinaw Aves., $40,000. F. W. Lyon, city engr.

W. Va., Wheeling—Comrs. Ohio Co. having plans prepared concrete curbing, widening and paving with brick on 7 in. concrete, 3,600 ft. Chapline St., 36 ft. $180,000. A. C. Hoffman, Court-house, engr.

North Carolina—State Hy. Dept., Raleigh, rejected bids clearing, grading and topsoiling 6.42 mi. road between Northampton Co. line and Aulander on Route 305, State Project 146, Hertford and Bertie Counties, $50,000; grading and waterbound macadam paving 4.03 mi. between Graham and Randolph Co. line on Route 62, State Project 507, Alamance Co., $115,000; grading, reconstructing and asphaltic paving 9.92 mi. around town of Wilson, State Project 295, Wilson Co., $180,000; clearing, grading, topsoiling and rein.-con. bridges and culverts on 8.64 mi. between Big Creek and Danbury via Moores Springs, State Project 750B, Stokes Co., $171,000; grading and waterbound or penetration macadam surfacing 8.27 mi. between Project 960 and Franklin on Route 286, State Project 961A and extension, Macon Co., $120,000. Will readvertise. C. M. Upham, state highway engr. Noted July 12.

Fla., Indian River City—Indian River City Town Site Corp. plans 6 mi. paving, curbing and guttering. $50,000. H. F. William, c/o Hotel Pines, Titusville, mgr.

Fla., West Palm Beach—Palm Beach Co. election Aug. 6 to vote on $30,000 bonds for 10 mi. Rds. 5 and 6, beginning at north line Gomez Grant and Indian River; $25,000 bonds 15 mi. Rds. 1 and 2, beginning at north line of Gomez Grant and Indian River; $25,000 bonds 20 mi. Rds. 3 and 4, beginning at north line of Gomez Grant and Indian River; $25,000 bonds 10 mi. Rd. 1 from northwest corner of Hanson Grant; $30,000 bonds 12 mi. Rds. 2, 3 and 4 from northwest corner of Hanson Grant. C. Holtshaw, West Palm Beach, engr.

Tenn., Columbia—Maury Co. plans bituminous macadam surfacing on old base 12 mi. highway between here and Mt. Pleasant, under supervision of State Hy. Dept., Nashville. $16,000 per mile.

Tenn., McMinnville—Voted $75,000 bonds paving various streets. O. C. Jennings, mayor. Noted Mar. 22.

Tenn., Nashville — Plans paving 18th and 19th Sts. from Church to Cedar Sts. and State St. from McMillan to 20th Sts., probably asphalt. W. N. Southgate, city engr.

Kentucky—State Hy. Comn., Frankfort, making plans grading 12.5 mi. Glasgow-Burksville Rd., Federal Aid Project 40, Barren Cd., 22-24 ft. J. Boggs, state highway engr.

Ky., Booneville — Owsley Co. plans to construct roads. $75,000. V. Thomas, co. judge.

Ky. Frankfort—Soon takes bids removing existing paving and paving with rock asphalt on concrete St. Clair and Main Sts. State pays one half cost. J. S. Boggs, state highway engr.

O., Cleveland—Davis & Farley Realty Co. soon takes bids laying sidewalks, mains and sewers in Independence Rd. allotment. $50,000. P. A. Jones, Leader-News Bldg., engr.

O., Columbus — Making plans grading, laying necessary water services and sewer connections and paving 2,125 ft. Essex St., 30 ft., and 1,432 ft. Camden Ave., 26 ft., brick or asphalt; 309 ft. alley west of Garfield Ave., 20 ft., brick or concrete; 2,387 ft. 6 in. mains in 4th and Roys Aves. R. H. Simpson, city engr.

O., Steubenville—Jefferson Co. plans rebuilding about 3.5 mi. road between Toronto and Stratton, 40 ft. $50,000. State will appropriate toward cost. L. Leech, Steubenville, engr.

Mich., Detroit—Making plans paving with 3½ in. sheet asphalt on 8 in. concrete, grading and Berea or medina curbstone, 5,100 sq.yd. Mackie Ave. $30,720; 7,100 sq.yd. La Salle Ave. $48,880; 3,300 sq.yd. Seneca Ave. $19,520. J. W. Reid, city engr.

Ill., East St. Louis—Making plans grading and paving 7,000 ft. Forest Blvd., McCausland, 10th, 19th and Henrietta Sts., 28 and 30 ft. $100,000. W. McK. Brown, City Hall, engr.

Kan., Garnett—Anderson Co. soon takes bids grading and gravel surfacing 8.474 mi. King of Trails Highway, 43,853 cu.yd. earth and 258 cu.yd. rock excav., 18,681 cu.yd. feather edge gravel, etc. F. T. Bonebrake, co. engr.

Kan., Kansas City—Soon takes bids concrete or brick paving 10 blocks. $25,000. R. L. McAlpine, city engr.

Kan., Lincoln Center—Making surveys paving various streets. $25,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Kan., Strong City—July 31, to vote on $68,000 bond issue repaving 6,000 ft. Cottonwood Ave.

South Dakota—State Hy. Comn., Pierre, plans grading 11 mi. Federal Aid Project 143, Marshall Co. $46,530. F. D. Hudgins, state highway engr.

N. D., Grand Forks—Plans paving 2nd and Conklin Aves. $46,547. J. H. Solsted, city engr.

Missouri—State Hy. Dept., Jefferson City, rejected bids July 6, improving 1.445 mi. State Project Route 14, Sect. 85, St. Louis Co. Noted July 19.

Mo., Clayton—Soon takes bids concrete paving about 2,800 ft. Forsythe Blvd., Carondelet, Meramec, and Central Aves., 30 ft. $28,374. J. Rapp, Clayton, engr.

Tex., Carrizo Springs—Dimmitt Co. election Aug. 14, to vote on $224,000 bonds for grading and topping 56 mi. highways from Cotula to Maverick Co. line. Total cost $448,000. State Hy. Com. appropriated $224,000.

Tex., Leakey — Real Co. making plans grading 18 mi. Kerrville Rock Springs Rd., 18 ft. $70,000. Federal Aid appropriation $35,000. W. E. Simpson, N. B. C. Bldg., San Antonia, engrs.

Tex., Palestine—Anderson Co. making plans grading, bituminous surfacing on macadam 35 mi. State Highway 19, 18 ft. $784,440. E. W. Davis, co. engr.

Tex., Paris—Lamar Co. making plans grading and concrete surfacing 2.54 mi. Paris-Honey Grove Sect. of State Highway 5, 18 ft. $75,000. W. M. Fooshee, co. engr.

Tex., Pecos—Reeves Co. making plans grading and gravel surfacing 15.5 mi. Old Spanish Trail from intersection of State Highway 1 to point 4.5 mi. west of Toyahvale, 16 ft. $100,000. A. J. Adcock, Grandfalls, co. engr.

Tex., Sulphur Springs—Hopkins Co. election Aug. 18 to vote on $160,000 bonds improving State Highway 1, from Sattillo Precinct to Hunt Co. line. R. E. Bertram, co. judge.

Ark., Newport — Making plans grading and asphaltic concrete paving on concrete 15 blocks in East Newport. $50,000. Bowman Eng. Co., Newport, engrs.

Wash., Seattle—King Co. soon takes bids paving 3 mi. Maple Valley Highway, 20 ft. $80,000. T. R. Beeman, co. engr. Noted July 19.

Wash., Seattle—Comrs. King Co. take bids about Aug. 15, grading and gravel surfacing 1.5 mi. East Valley Rd. $37,000. T. R. Beeman, co. engr.

Streets and Roads (Continued)

Wash., Tacoma—Plans paving Portland Ave. et al., 7 in. concrete, $78,003. J. C. Manley, city engr.

Calif., Auburn — Making plans paving various streets with 5 in. concrete. To exceed $50,000. J. Barleau, city engr.

Calif., Beverly Hills—Voted $25,000 bonds for street improvements.

Calif., Carmel—See "Miscellaneous."

Calif., Fresno—Had plans prepared improving E St. between Fresno and Inyo Sts., 100,780 sq.ft. grading, 93,950 sq.ft. 3½ in. asphaltic concrete, 1½ in. surface, 6,120 sq.ft. concrete gutter, 3,370 lin.ft. concrete curb, 18,645 sq.ft. sidewalks, 755 sq.ft. concrete pavement, etc. W. Stranahan, city engr.

Calif., Oakland—City to appropriate $125,000 opening 20th St.; $100,000 paving East 14th St.; $37,500 extending Skyline Blvd.; $14,000 paving portion Foothill Blvd.; $55,000 extending 10th St.; $75,000 opening Jefferson St. W. W. Harmon, city engr.

Calif., Salinas—Had plans prepared grading, laying gutters and paving 18,327 sq.ft. South Capitol St., 6 in. waterbound macadam. H. F. Cozzens, city engr.

Calif., San Diego — Common Council plans improving Elm St. from Columbia St. to Balboa Park, 81,257 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc. F. A. Rhodes, city engr.

Calif., San Diego—Had plans prepared curbing and paving 123,763 sq.ft. Imperial Ave., 180,832 sq.ft. Imperial Ave. through Ecanto Dist., and 164,267 sq.ft. 12th St. extension and portion of Park Blvd., 1½ in. willite, warrenite or asphaltic concrete on 3 in. bituminous base. A. H. Wright, city clk.

Calif., San Francisco—Plans reconstructing streets south of Market Dist. $106,000 appropriated. M. M. O'Shaughnessy, city engr.

Ont., Chatham—Plans paving Queen and Mercer Sts., 10,000 sq.yd. asphalt on concrete. $39,615. C. H. R. Fuller, City Hall, engr.

Ont., Hamilton — Takes bids early in August concrete paving Ottawa St. $4[illegible]-000. Interested in prices of materials. W. L. McFaul, city engr.

Ont., Kitchener—Waterloo Co. plans 1,800 sq.yd. concrete pavement, 800 lin.ft. concrete curb and gutter in Village of Ayr; 3,400 sq.yd. macadam pavement, 1,800 lin.ft. concrete curb and gutter in Preston; 5 rein.-con. bridges and culverts with 4-16 ft. span slab tops. $35,000. L. S. Lichty, County Bldgs., Kitchener, engr.

Ont., Oshawa — Plans concrete curbing, guttering and paving with asphalt on concrete 30,000 sq.yd. Simcoe, King, Division, Bruce, Hillcroft, Masson, Celina, Gretna, Aberdeen, Connaught and Harold Sts., Ritson Rd., Barrie and Olive Aves.; 8,000 lin. ft. 4 ft. concrete sidewalks on Alma, Caradoc, Athol, McGregor and Jarvis Sts., Oshawa Blvd., Lawrence and Eulalie Aves. and Base line. $150,000. W. C. Smith, Town Hall, engr.

Ont., Port Dalhousie—Lincoln Co. (St. Catharines), plans 14,000 sq.yd. concrete pavement, here. $40,000. F. N. Rutherford, County Bldgs., St. Catherines, engr.

BIDS DESIRED

New Hampshire—July 31, by State Hy. Dept., Concord, gravel surfacing 3.17 mi. in Wolfeboro, Chichester and Epsom; paving 1.48 mi. in Hanover, waterbound macadam; 0.85 mi. in Fitzwilliam and Auburn, bituminous macadam. F. E. Everett, state highway comr.

Vermont—Aug. 2, by T. W. Dix, ch. engr., Dept. Highways, Montpelier, 1.33 mi. road in Windsor, 1.85 mi. road incl. one 62 ft. steel truss bridge, in Ferrisburg, one 80 ft. steel truss bridge and approaches in Wolcott, 3.03 mi. road in Randolph; adv. this issue.

Massachusetts—July 31, by W. F. Williams, state highway comr., State House, Boston, 2,400 ft. road, 20 ft., in New Braintree, $25,000; 4,000 ft. in Amesbury, $35,000; 7,700 ft. in Framingham, $70,000, all foregoing bituminous macadam; 9,330 ft. in Mashpee and Sandwich, $90,000. J. R. Rablin, ch. engr.

Rhode Island — July 25, by State Bd. Pub. Wks., Providence, surfacing 1 mi. Tiverton-Stafford Rd., 18 ft., waterbound macadam, Contr. 2306; 1 mi. Little Compton-Adamsville Rd., 18 ft., gravel, Contr. 2307. $25,000. W. A. Patterson, state highway engr.

DYKES—MISSOURI

Bids were opened by Bd. Pub. Serv., St. Louis, June 12, for constructing fifteen 3-row hurdle dykes and 2-story office building along Missouri River near St. Charles, (A) Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, (awarded contract); (B) List & Gifford Contg. Co., Merchants Laclede Bldg., St. Louis; (C) Norton Bros. & Massman, St. Louis; (D) Woods Bros. Constr. Co., Railway Exchange, St. Louis. The unit bids were as follows:

	A	B	C	D
1,866,250 sq.ft. mattrass	$0.795	$0.11	$0.09	$0.10
47,500 cu.yd. grading	.32	.40	.25	.60
48,525 cu.yd. stone	3.70	3.40	3.80	4.75
417,726 lin.ft. piling	.21	.20	.30	.26
417,726 lin.ft. pile driving	.31	.39	.35	.395
Office building (lump sum)	9,680.00	15,000.00	15,750.00	15,525.00
Extended totals	$570,007	$650,731	$651,504	$734,754

ROAD WORK—DELAWARE

Following are lowest three bids opened by State Highway Comn., June 6, for constructing 5.59 mi. road from Kenton to Smyrna, Kent Co., (A) Hamill & Moriarty, Inc., Baltimore; (B) E. R. Mixner Co., Goshen, N. J.; (C) M. Staub, Pitman, N. J.

	A	B	C
33,000 cu.yd. excavation	$1.15	$1.25	$1.35
1,200 cu.yd. borrow	1.00	1.50	1.65
200 ton sub-base	5.00	5.00	6.00
9,725 cu.yd. concrete pavement	13.95	14.06	14.70
375 cu.yd. class "A" concrete	28.00	35.80	32.00
13,000 lb. reinforcement	.10	.10	.10
1,000 lin.ft. 15 in. rein.-con. pipe	3.00	2.75	3.00
188 lin.ft. 18 in. rein.-con. pipe	3.60	3.45	4.50
154 lin.ft. 24 in. rein.-con. pipe	5.50	5.40	7.00
30 lin.ft. 42 in. rein.-con. pipe	15.00	10.50	20.00
200 lin.ft. relaid pipe	3.00	2.00	2.50
2,000 lin.ft. w.c. guard rail	.55	.80	.75
3,000 lin.ft. wood shoulder curb	.45	.30	.40
Extended totals	$195,665	$202,654	$212,712

VIADUCT—ST. LOUIS, MO.

Following are lowest three bids opened by Bd. Pub. Serv., June 5, for rein.-con. viaduct on 14th St., (A) F. A. Stiers, 4500 Enright Ave., (awarded contract); (B) Fruin-Colnon Contg. Co., Merchants-Laclede Bldg.; (C) Higgins-Wall-Dyer Co., International Life Bldg. The units bids were as follows:

	A	B	C
5,120 sq.yd. removing paving blocks	$0.50	$0.60	$0.50
18,900 cu.ft. removing old masonry	.19	.30	.10
4,400 cu.yd. grading	1.50	1.50	1.00
27,840 cu.ft. excavation, class "A"	.37	.45	.70
117,070 cu.ft. excavation, class "B"	.13	.20	.30
65,930 cu.ft. excavation, class "C"	.14	.10	.15
1,940 cu.ft. excavation, class "D"	.42	.50	.50
35,170 lin.ft. concrete piling	2.10	2.25	3.00
Sewer drainage (lump sum)	3,690.00	6,000.00	3,300.00
12,090 cu.ft. concrete, class "A"	.96	.75	.60
239,895 cu.ft. concrete, class "B"	.66	.70	.60
68,285 cu.ft. concrete, class "C"	.42	.60	.73
33,360 cu.ft. concrete, class "D"	.44	.50	.60
30,040 cu.ft. concrete, class "E"	.32	.40	.60
2,025,000 lb. steel reinforcing	.05½	.04½	.03½
98,300 sq.ft. surface finish	.06	.05	.05
Expansion joints, waterproofing (lump sum)	2,400.00	1,600.00	2,000.00
800 cu.ft. rubble masonry	.50	.60	.50
Wooden railing (lump sum)	100.00	200.00	250.00
Extended totals	$468,944	$488,961	$495,585

New York—Aug. 10, by F. S. Greene, comr. of highways, Albany, constructing and reconstructing highways in Chautauqua, Columbia, Genesee, Greene, Orange, Rensselaer, St. Lawrence, Steuben, Tioga, Tompkins and Westchester Counties. W. A. Patton, secy.; adv. this issue.

N. Y., Brooklyn—Aug. 1, by E. Riegelmann, boro pres., Boro Hall, paving Ave. J, Rutland Rd., Dumont and East New York Aves., East 36th, East 37th and 53rd Sts.; curbing and paving East 26th St. and Ave. J.; recurbing and paving Lincoln Ave.; repaving 41st St., southerly portion of Atlantic Ave., Miller, Franklin and Ocean Aves.; paving and repaving Troutman St., all asphalt; grading, curbing and flagging Ave. J, Leroy Rd., East 36th and East 37th Sts.; resurfacing with asphalt by heater method Clermont, Evergreen, Putnam and Saratoga Aves., Downing, Henry and Raymond Sts.

N. Y., Dobbs Ferry—Bd. Village Trustees taking bids repairing and improving portion Main St. L. C. French, pres.; adv. this issue.

N. Y., Long Island City—July 31, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading sidewalk spaces in Clermont Ave.; curbing, laying sidewalks and paving Forest Ave., sheet asphalt; repaving Grand St., improved granite block; recurbing and paving George St., sheet asphalt on concrete; grading, curbing and laying sidewalks on Provoost St.; curbing and laying sidewalks, etc., from Graham to Jackson Aves.; paving 13th Ave., sheet asphalt on concrete.

N. Y., St. George — July 30, by J. A. Lynch, pres. Richmond Boro, Boro Hall, grading and laying sidewalks on Castleton Ave.; concrete curbing and guttering Mountainview Ave.; temporary sewer in Alabama St.

New Jersey—Aug. 6, by State Hy. Dept., Trenton, rein. con. paving, constructing or reconstructing 4 rein.-con. bridges on Route 8, Sect. 4, Charlottesburg-Smiths Mills, Passaic Co.; rein.-con. paving Route 14, Sect. 8, Swainton to Ocean View, Cape May Co. A. L. Grover, ch. clk.; adv. this issue.

N. J., Freehold — Aug. 8, by Bd. Freeholders Monmouth Co., Court House, reconstructing extension to Farmingdale-Manasquan Rd. 34, Sect. 3. G. D. Cooper, 60 Broad St., Red Bank, civil engr.; adv. this issue.

N. J., Mays Landing—Aug. 8, by Bd. Freeholders Atlantic Co., Guarantee Trust Bldg., Atlantic City, repairing or reconstructing Absecon Blvd. joining Absecon and Atlantic City. F. W. Willetts, clk.; adv. this issue.

N. J., Park Ridge—Aug. 6, by Mayor and Boro Council, Century Hook and Ladder Hall, curbing and laying concrete sidewalks on Main St., Ridge and Park Aves. H. G. Hering, Jr., 3 Westwood Ave., Westwood, boro engr.; adv. this issue.

Pa., Greenburg — Aug. 10, by Comrs. Westmoreland Co., 1 mi. Bolivar Rd., 16 ft., rein.-con., $30,000; 4,670 ft. Edgecliff-Braeburn Rd., concrete, $30,000. Former bids rejected. W. G. Muse, Co. Court House, engr.

Pa., Lewistown—Aug. 6, by Boro Council, paving 4th, Grand, Dorcas and Hale Sts., 7,969 sq.yd. rein.-con., etc. W. Fosnot, Pres. Banks & Craig, Telegraph Bldg., Harrisburg, engrs.

Delaware—Aug. 8, by State Hy. Dept., Dover, constructing 4.58 mi. highway from Kirkwood to Tybouts Corner, Contr. CN 23; 0.91 mi. through Dagsboro, Contr. CS 28; adv. this issue.

Md., Baltimore—Aug. 1, by Bd. Awards grading and paving streets, Contrs. 241-OONA, 244-OA, 241-OANA, 17,615 sq.yd. sheet asphalt, 2,100 sq.yd. granite block repaved, Contr. 244-OA, 1,600 sq.yd. con-

Streets and Roads (Continued)

crete. $40,000. R. K. Compton, 214 East Lexington St., chn. paving com.

W. Va., Bluefield—Aug. 14, at office of C. E. Ridley, city mgr., paving Projects 1, 2, 3 and 4; adv. this issue.

W. Va., Clarksburg—Aug. 14, by Comrs. Harrison Co., 2 mi. concrete surfacing; 1 mi. Telford base, slag surface; grading and surfacing 4,000 ft. with concrete, also building 9 concrete bridges. G. L. Coyle, Clarksburg, engr.

S. C., Walterboro—Aug. 9, at office of P. M. Buckner, Walterboro, sand clay surfacing 40,500 cu.yd. State Route 30, incl. 146,000 cu.yd. excav., 3 timber bridges, etc., Colleton Co. W. C. Cathey, Orangeburg, engr.

Georgia—Aug. 3, by State Hy. Dept., at East Point, grading 2.014 mi. Federal Aid Project 320, Habersham Co., H. W. Morgan, Gainesville, engr.; clearing and graveling 6.124 mi. Federal Aid Project 337, Ware Co., alternate bids on 64,674 sq.yd. 8 in. compacted clay gravel and local semi-gravel surface; 148,493 sq.yd. Federal Aid Project 334, Ware Co., compacted clay gravel. C. L. Rhodes, Waycross, engr.

Florida — Aug. 8, by State Rd. Dept., Tallahassee, constructing or improving 2.3 mi. Rd. 1, Project 38, Escambia Co., being embankment portion of Escambia River Bridge. W. F. Cocke, state highway engr.

Fla., Clearwater — Aug. 23 (change of date) by Comrs. Pinellas Co., paving Rds. 1, 2, 3, 4, 6, 7 and 8, vitr. brick with bituminous filler, asphalt block, sheet asphalt, bituminous macadam penetration or inverted penetration method, all on compacted lime rock base, with concrete curb, or portland cement concrete; Rd. 5, relaid vitr. brick, with bituminous filler and double bituminous surface-treated lime rock shoulders. C. E. Burleson, co. engr.; adv. this issue. Noted July 12.

Fla., DeLand—Aug. 6, by Comrs. Volusia Co., hard surfacing 39.5 mi. road in Turnbull Special Rd. & Br. Dist. $100,000. N. A. Hotard, New Smyrna, engr.

Fla., Inverness—July 31, by Comrs. Citrus Co., improving 80 mi. highways, 155,000 cu.yd. grading, 55,000 cu.yd. limestone and sand-clay surfacing. Twelve separate roads, bids on all or part. E. V. Camp & Co., Jacksonville, and Decatur Court House, Atlanta, Ga., engrs.

Fla., Tavares—July 30, by M. V. Simpson, chn. Comrs. Lake Co., grading and sand-clay surfacing 17.3 mi., Rds. 4 to 7 inclusive, $26,000; 19½ mi. Rds. 8 to 13 inclusive, $29,250; 25.1 mi. Rds. 1 B, 2 and 3, $37,500. All roads in South Lake Special Road & Bridge Dist. G. E. Heller, Tavares, engr.

Ala., Bessemer — Aug. 27, by Mayor, grading and paving 14 blocks Pearson Ave., 2 or 2½ in. sheet asphalt or bitulithic concrete on 6 in. concrete, 30 and 25 ft., $47,750, 4 blocks sidewalks, 2 in. asphaltic concrete on 5 in. concrete, $4,500.

Miss., Belzoni — Aug. 6, by highway comrs. of Northern Separate Rd. Dist. of Supervs. Dist. 1, Humphreys Co., at office of Chancery Clerk, improving roads, 28,905 cu.yd. borrow excav., 9.56 mi. common machine grading, 17,218 cu.yd. road gravel furnished, hauled one mile and placed, 146,267 units, cu.yd. overhauled ½ mile and placed, etc. C. E. Miller, Belzoni, engr.

Miss., Gulfport — Aug. 9, at Chancery Clerk's Office, Harrison Co., grading, paving 1.543 mi. roads, 18 ft., warrenite bitulithic, asphaltic concrete, or brick on concrete base course or one course concrete. $46,305. H. D. Dietzer, Jackson, state highway engr.

Louisiana—Aug. 7, by State Hy. Dept., Reymond Bldg., Baton Rouge, grading, timber bridges and sand clay gravel surfacing 10,083 cu.yd. Sect. B Vinton-Orange Highway, Federal Aid Project 43. Calcasieu Parish; gravel surfacing 2.987 cu.yd. Sect. C Vinton-Orange Highway, Calcasieu Parish; grading, bridging and gravel surfacing 6.93 mi. Sects. A and B Walker-Dutchtown Highway, State Project 350, Ascension Parish. J. M. Fourmy, state highway engr.

Louisiana—Aug. 14, by State Hy. Dept., Baton Rouge, grading, gravel surfacing, etc., 9.555 mi. Minden-Shreveport Highway, Federal Aid Project 116, Sect. A, Webster Parish. J. M. Fourmy, state highway engr.

La., Baton Rouge—Aug. 2, by Commission Council paving 23,600 sq.yd. St. Louis and Government Sts., brick, bitulithic, sheet asphalt, asphaltic concrete or rein.-con. J. W. Billingsley, Interstate Bldg., New Orleans, engr.

La., Baton Rouge—Aug. 7, by Commission Council at office of Mayor, City Hall, paving St. Louis and Government Sts. J. W. Billingsley, consult. engr.; adv. this issue.

La., Rayville—Aug. 7, by Police Jury Richland Parish, clearing, grading and gravel surfacing 7.5 mi. highway. J. C. Salmon, clk.

Tennessee — Aug. 10, by State Dept. of Hys. and Pub. Wks., Nashville, grading, surfacing and bridging, etc., 7.99 mi. Federal Project 94; 11.02 mi. Federal Project 96; 14.64 mi. State Project 113; 7.53 mi. State Project 115; 10.78 mi. State Project 126; 12.3 mi. State Project 127; 8.6 mi. State Project 128; 5 mi. State Project 130; 281 ft. bridge over Stones River. Federal Project 89; 2 bridges State Rd. 47, State Project 129; bridge over Drake Creek, Federal Project 63-D. J. G. Creveling, Jr., comr; adv. this issue.

Ohio—Dept. Highways and Pub. Wks., Columbus, taking new bids grading, bridging and paving Sects. "G" and "L" Mt. Gilead-Galion Rd., Morrow Co. Noted June 7.

Ohio—July 31, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 2.002 mi. Sect. "P" Akron-Wooster Rd., Wayne Co., monolithic brick, $58,307. A. V. Donaheys, dir. highways.

O., Akron—July 30, by S. Porter, clk. Summit Co. grading, curbing and paving 79,500 sq.yd. Cleveland-East Liverpool Rd. 12, and Sects. E, E2, F and G Richfield-Hudson Rd., bituminous concrete, bituminous macadam or bitoslag. $314,909. J. Weaver, Delaware Bldg., engr.

O., Akron—July 30, by W. F. Peters, dir. Pub. Serv., grading, curbing, guttering, laying sidewalks and paving Mt. Vernon Ave., 4,420 sq.yd. vitr. brick or 3,520 sq.yd. 3 in. asphalt, $35,000; Murray Ave., 4,730 sq.yd. vitr. brick or 3,780 sq.yd. asphalt, $39,000; resurfacing 2,875 sq.yd. Campbell St., 3 in. asphalt, $20,000; grading, laying sidewalks, etc., on 1,100 cu.yd. East South St., cinders or gravel, $14,000. E. A. Kemmler, Delaware Bldg., engr.

O., Akron—Aug. 13, by W. F. Peters, dir. Pub. Serv., repaving 7,600 sq.yd. Johnston St., $75,000; grading, paving and laying sidewalks on 2,600 sq.yd. Berwin St., vitr. brick or asphalt, $25,000; Rentschler Court and Power St., 2,700 sq.yd. vitr. brick $27,411 or 2,150 sq.yd. asphalt, $26,606. E. A. Kemmler, Delaware Bldg., engr.

O., Bellaire—Aug. 1, at office of G. T. Kreglow, dir. Pub. Serv., City Bldg., grading, curbing, paving, etc. Colerain Lane (49th St.), Archison Rd. (Noble St.), and Trumbull and Gurnsey Sts.

O., Cincinnati—Aug. 3, by Hamilton Co., grading, bridging and paving Sheed Rd., 39,500 sq.yd. bituminous macadam, 103,000 gal. tar grade 1 and 1,900 cu.yd. 1:2:4 concrete. $109,111. E. A. Gast, Court House, co. surv.

O., Cleveland—Aug. 6, by Bd. Educ., East 6th St. and Rockwell Ave., grading walks, landscaping, retaining walls, etc., at Patrick Henry, Benjamin Franklin, Lincoln High and John Adams Schools. To exceed $100,000. W. R. McCornack, East 6th St. and Rockwell Ave., archt.

O., Columbus—July 31, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewers and paving 2,092 ft. Monroe Ave., 24 ft., asphalt, $33,149; 719 ft. Park St. S., 24 ft. and 469 ft. 8th St., 26 ft., brick or asphalt; 3,226 ft. alley north of Norwich Ave., alley north of Fulton St. from Parsons to Monroe Aves. and alley north of Fulton St. from 18th St. to east line of lot No. 28, 20 ft., 501 ft. alley north of Blake Ave., 15 ft., 762 ft. alley north of Hanford St., 16 ft., and 552 ft. alley west of 20th St., 17 ft., brick or concrete.

Michigan—Aug. 1, by State Hy. Dept., Lansing, grading and surfacing Federal Aid Project 93, Ingham Co., 63,420 sq.yd. concrete, 30,201 cu.yd. earth excav. F. F. Rogers, comr.

Michigan—Aug. 6, by State Hy. Dept., Lansing, grading and surfacing Federal Aid Project 125, Gratiot Co., 22,288 cu.yd. earth excav., 56,731 sq.yd. asphalt, concrete or bituminous macadam. F. F. Rogers, comr.

Michigan—Aug. 7, by State Hy. Dept., Lansing, grading, surfacing, etc., 1.324 mi. State Trunk Line Rd. 27-2A, Middleville, 10,003 sq.yd. concrete, 6,731 cu.yd. earth excav. and 4,464 sq.yd. gravel; 3.32 mi. State Trunk Line Rd. 66-16, Missaukee Co., 21,905 cu.yd. earth excav. and 31,778 sq.yd. gravel. F. F. Rogers, comr.

Michigan—Aug. 8, by State Hy. Dept., Lansing, grading and gravel surfacing State Trunk Line Rd. 66-17, Kalkaska Co., 65,664 sq.yd. gravel, 82,909 cu.yd. earth. F. F. Rogers, comr.

Michigan—Aug. 9, by State Hy. Dept., Lansing, grading, surfacing, etc., 6.083 mi. State Trunk Line Rd. 46-20, Sanilac Co., 31,713 cu.yd. excav. and 65,3[illegible] sq.yd. gravel, 11.093 mi. State Trunk Line Rd. 27-12 Sects. A, B and C, Sanilac Co., [illegible],000 sq.yd. concrete, 49,063 cu.yd. earth excav., 101,111 sq.yd. gravel, 1.466 mi. State Trunk Line Rd. 11-9, Sect. B, Muskegon Co., 7,873 cu.yd. earth excav. and 16,279 sq.yd. asphalt, concrete or bituminous concrete. F. F. Rogers, comr.

Wisconsin—July 31, by State Hy. Comn., at div. office 7, Court House, grading and surfacing 3.62 mi. Rhinelander-Crossian Tomahawk Rd., Oneida Co., 10.61 acres clearing, 24,356 cu.yd. earth excav., 4,395 cu.yd. topsoiling, 4,395 cu.yd. gravel, etc. A. R. Hirst, Madison, highway engr.

Wisconsin—July 31, by State Hy. Comn., at div. office 1, 149 East Wilson St., Madison, grading and surfacing Waterloo-Marshall Rd., Dane Co., 2,040 cu.yd. excav., 3,820 cu.yd. fine grading, 31,427 sq.yd. concrete, etc.; Waterloo-Marshall Rd., Jefferson Co., 5,585 cu.yd. earth excav., 5,610 sq.yd. concrete, etc. A. R. Hirst, highway engr.

Wis., North Milwaukee—Aug. 7, by W. E. Chase, city clk., improving 41st, 40th, 38th, 34th, 29th Sts. and 3 alleys, 16,798 sq.yd. concrete, vibrolithic concrete, sheet asphalt or bituminous concrete, 9,687 cu.yd. grading. H. C. Webster, City Hall, engr.

Ia., Knoxville—Aug. 8, by Marion Co. grading 111,614 cu.yd., etc., primary road northwest and southeast of Pella. Iowa Hy. Com., Des Moines, engrs.

Ia., Wapello — Aug. 7, by Louisa Co. grading 9.949 mi. road north and south of Grandview, 89,887 cu.yd. excav., 8,440 ft. tiling, etc. Iowa Hy. Comn., Ames, engrs.

Minn., St. Paul—Aug. 6, by G. J. Ries, aud. Ramsey Co., gravel surfacing 8,301 cu.yd. South Robert St. from Territorial Rd. to end of present paving on South Robert St. extension project, 186,436 cu.yd. earth excav., 247,435 cu.yd. overhaul, etc. $45,000.

Minn., White Bear (White Bear Lake P. O.)—Aug. 13, by aud. Ramsey Co., (St. Paul), paving North Birch Lake Blvd. between Centerville and Bald Eagle Aves., here, 26,000 sq.yd. one course concrete or asphaltic concrete, 4,304 lin.ft. integral curb, 2,710 lin.ft. 18 in. vitr. sewer pipe, etc. $65,000. P. N. Coates, co. surv.

Kan., Bennington—Aug. 10, by Clerk Ottawa Co. (Minneapolis) grading and concrete surfacing 0.748 mi. Nelson St., here, 11,374 sq.yd. concrete, 5,217 lin.ft. concrete curb and gutter, 3,435 cu.yd. earth excav. E. O. Adee, co. engr.

Kan., Independence—Aug. 3, by Clerk Montgomery Co. bituminous macadam surfacing 85,031 sq.yd. Cherryvale-Morehead Rd., Federal Aid Project 79, Sects. A and B. H. K. Hibbard, co. engr. Noted June 21.

Kan., Kansas City—Aug. 13, by Clerk Wyandotte Co., grading, building culverts and surfacing old macadam with rock asphalt on 2.675 mi. Gibbs Rd. O. K. Williamson, co. engr.

Tex., Abilene—City Com. taking bids paving 26,000 sq.yd. 3rd Ave., South 7th, North 3rd and Victoria Sts., brick, concrete or bituminous. $75,000. H. H. Batjer, city engr.

Tex., Eastland — July 31, by E. S. Pritchard, judge Eastland Co., bituminous topping on waterbound macadam 19.14 mi. State Highway 23 A, 30,363 cu.yd. crushed stone, 126,518 gal. asphalt, etc., $125,000; 18.67 mi. State Highway 18, 14,772 cu.yd. crushed rock, 185,573 gal. asphalt, etc., $120,000; 10.04 mi. State Highway 22, 11,892 cu.yd. crushed stone, 66,410 gal. asphalt, etc., $65,000. C. S. Henning, Jr., co. engr.

Utah—Aug. 10, by State Rd. Comn., Salt Lake City, grading and concrete paving Underpass Sect. Price-Castle Gate Highway, also grading, paving, curbing, etc., Main St., Price City, Federal Aid Project 24-C, 18,000 cu.yd. common excav., 24,000 sq.yd. 7 in. concrete, 4,500 lin.ft. curb and gutter, etc. H. C. Means, ch. engr.

Arizona — Aug. 3, by State Hy. Dept., Phoenix, grading, 4 in. gravel surfacing and channel changes on 10 mi. road from Hassayampa River to Gillespie Dam, 18 ft., 33,500 yd. excav., 17,896 yd. borrow, 979 yd. concrete, etc. $126,125. F. R. Goodman, state engr.

Washington—Aug. 7, by State Hy. Comn., Olympia, grading and surfacing with crushed rock on gravel 4.63 mi. Chelan-Okanogan highway from Brewster Flat north, grading and surfacing with crushed gravel 3.65 mi. from Okanogan to Malett, in

Streets and Roads (Continued)

Okanogan Co.; surfacing with crushed rock 12.47 mi. inland Empire Highway from Ellensburg to Indio, Kittitas Co. J. Allen, state highway engr.

Wash., Seattle — King Co. taking bids grading and gravel surfacing North 110th St. from Greenwood Ave. to Puget Sd. $25,000. T. R. Beeman, co. engr.

Wash., Yakima — Aug. 23, by Comrs. Yakima Co., grading and graveling Yakima Highway, 10,000 cu.yd. gravel and 15,000 cu.yd. excav. $26,000. O. E. Brashears, Yakima, engr.

California—Aug. 6, by State Hy. Comn., Sacramento, grading and gravel surfacing 4.5 mi. road between point 5 mi. east of Gilroy and San Felipe, Santa Clara Co. R. M. Morton, state highway engr.

California—Aug. 13, by State Hy. Comn., Sacramento, grading and gravel surfacing 11.5 mi. road between Baltane and Schellville, Sonoma Co.; paving 3.4 mi. road between San Bruno and San Mateo, San Mateo Co., concrete shoulders and asphaltic concrete surface. R. M. Morton, Forum Bldg., state highway engr.

Calif., Yreka—Aug. 6, by Superv. Siskiyou Co., improving Forest House Mountain Rd. 169. To exceed $35,000. A. F. Parrott, co. surv.

Quebec — Aug. 7, by J. L. Boulanger, dept. minister, Dept. of Rds., Quebec, paving 52,917 ft. highways, 16 ft., oiled waterbound macadam.

BIDS RECEIVED

Conn., Hartford — Paving Preston St., 7,000 sq.yd. 1:1½:3 concrete, from O'Neil Bros., 983 Main St., $28,260. Noted Apr. 19.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, July 18, grading, curbing and flagging (1) Dumont Ave. (2) 48th St., sheet asphalt paving (3) Dumont Ave. (4) Greene Ave. (5) 15th Ave. (6) 4th St. (7) Hegeman Ave., grading, recurbing and reflagging (8) Hegeman Ave., resurfacing (9) Oriental Blvd. (10) West End Ave., both bituminous macadam, repaving (11) Bway. (12) Gold St., both grade 1 granite, grading sidewalk space and flagging (13) Highlawn Ave., asphalt repaving (14) South 5th St., from T. B. Scott. 671 Halsey St., (1) $2,443 (13) $932; C. Bennett Contg. Co., 414 Rutland Rd., (2) $11,119; Cranford Co., 52 9th St., (3) $7,163 (5) $8,151 (6) $10,741; Borough Asphalt Co., 1301 Metropolitan Ave., (4) $63,999 (7) $3,118; R. Lynster, 1364 Sterling Pl., (8) $1,775; Galecor Contg. Co., 507 Greenwich St., New York, (9) $19,389 (10) $10,057; F. J. Gallagher 490 Park Pl., (11) $5,304 (12) $23,926; Sicilian Asphalt Paving Co., 41 Park Row, New York; (14) $17,942. Noted July 12.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., July 23, repaving (1) Corona Ave., asphalt, (2) Greenpoint Ave., asphalt block (3) Metropolitan Ave., improved granite block, grading and paving (4) 101st Ave., sheet asphalt, grading, curbing, laying sidewalks, etc., on (5) Liberty Ave. (6) Roosevelt Ave. (7) 2nd Ave. (8) Woodhaven Ave. (9) Hillside Ave., from Cleveland Trinidad Paving Co., Flushing, (1) $8,398 (6) $7,452 (7) $75,296; Welsh Bros. Contg. Co., 32 Queens St., Astoria (2) $58,983; Necaro Co., Inc., 97 Court St., Brooklyn, (3) $85,086; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (4) $47,484 (5) $220,335 (9) $40,080; W. P. McDonald Constr. Co., 17 West 42nd St., New York City, (8) $328,987. Noted July 19.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, etc. (1) Balcom Ave., grading curbing, laying sidewalks on (2) Bronxwood Ave. (3) Walton Ave. (4) Thierot Ave. (5) Mace Ave. (6) Paulding Ave. (7) Grand Ave., paving (8) Morris Park Ave. (9) East 172nd St., both bituminous concrete (10) Rogers Pl. (11) West 192nd St., both sheet asphalt repaving (12) West Tremont Ave. (13) Jerome Ave. (14) Burnside Ave., granite block (15) Crotona Ave., asphalt blocks, grading, regrading, etc. (16) Exterior St., from P. J. Donovan, 30 Church St., (1) $24,060 (2) $42,296 I. F. Cavaluzzo, 1538 Walton Ave., (3) $24,673 (4) $12,536 (5) $26,900; P. J. Kearns Contg. Co., 2306 Creston Ave., (6) $12,122 (13) $73,344; C. D. Beckwith, 2875 Bway., (7) $66,136; Interboro Asphalt Co., 2306 Creston Ave., (8) $43,917; J. E. Gaffney, 438 East 91st St., (9) $4,667 (10) $7,912; Asphalt Constr. Co., 208 Bway., (11) $19,029; Astoria Contg. Co., 169 Hunter Ave., Long Island City, (12) $83,524; Burnside Contg. Co., 270 Burnside Ave., (14) $35,765; Regan Towers, Inc., 124 West 121st St., (15) $78,031 (16) $33,118. Noted July 12.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., N. Y., repaving (1) East 90th St. (2) 104th St. (3) 131st St. (4) Amsterdam Ave., sheet asphalt (5) repairing sheet asphalt pavements in railroad area (6) repairing wood block and granite block pavement in railroad area, from C. D. Beckwith, Inc., 2875 Bway., (1) $15,495; Brusstar Constr. Co., Harlem River and 150th St., (2) $21,301; Sicilian Asphalt Paving Co., 41 Park Row, (3) $57,023; Asphalt Constr. Co., 208 Bway., (4) $161,700; Cleveland Trinidad Paving Co., Flushing, (5) $76,800; Casper Helbock Co., Harlem River and 150th St., (6) $49,680. Noted July 19.

N. J., Bloomfield—See "Sewers."

N. J., Nutley—G. C. Bergen, purch. agt. Essex Co. (Newark) July 3, grading and paving Franklin Ave., here, 3 in. asphalt on 6 in. concrete, from Franklin Contg. Co., 20 Washington Pl., Newark, $106,455; draining above street, from P. Lordi, 147 Bloomfield Ave., $22,937. Noted June 28.

N. J. Trenton — Mercer Co. rein.-con. paving 8,733 sq. yd. Upper River Rd., from Ross & Whelan, Broad St. Bank, $48,561. Engrs. est. $49,561. Noted July 12.

Florida — State Rd. Dept., Tallahassee, grading 7 mi. road between Punta Garda and Lee Co. line, 30 ft., 87,780 cu.yd. excav., Charlotte Co., from Mickler & McLeod, Stovall Bldg., Tampa, $41,623. Noted June 28.

O., Akron—W. F. Peters, dir. Pub. Serv., grading, laying sidewalks and paving 1,075 ft. Rentschler Court, 22 ft., (a) 2,150 sq.yd. asphalt (b) 2,700 sq.yd. vitr. brick, from P. T. and W. P. McCourt, 365 South Main St., (a) $31,740 engrs. est. $26,606, McAlonan Bros., 197 West Buchtel Ave., (b) $32,640, engrs. est. $27,141. Noted July 12.

O., Cleveland—Asphalt paving West 17th St., from Rieley Bros., The Arcade, $2,840; East 93rd St., from Bentley Bros., Union Bldg., $24,204; Bulkley Blvd., from W. E. McHugh, Pavers Exch., $3,683; West 103rd St. and Revere Ave., from Baldwin Bros., 4500 Euclid Ave., $7,081 and $29,316 respectively. Work involves 5,450 lin.ft. stone curb, 6,880 lin ft. 4 in. tile gutter, 5,240 cu.yd. earth excav. and 7,810 sq.yd. asphalt.

O., Cleveland—Bd. Educ., East 6th St. and Rockwell Ave., masonry work at Sunbeam School, East Blvd. and Mt. Overlook Ave., from C. H. Carson Co., 7016 Euclid Ave., $23,800; grading and landscaping at above school, from Independence Nurseries Co., Independence, $20,268. Noted July 5.

O., Cleveland—Curbing, guttering and paving St. Clair Ave., from Gould & Maybach, 16311 Saranec Rd., asphalt $60,791, granite $95,612.

O., Cleveland—Repaving 9,530 sq.yd. West 9th St., asphalt, from Cleveland Trinidad Paving Co., The Arcade, $40,557.

O., Warren—Cement curbing and paving Main St., from F. George, Warren, brick on 6 in. concrete, $139,527; F. Geiger, Warren, 8 in. concrete $154,220; Smith Eng. Co., Warren, 6 in. base asphalt top, $144,547.

Michigan—State Hy. Dept., Lansing, grading and concrete surfacing 13,296 sq.yd. State Trunk Line Rd. 55-4, in Cadillac, from Wexford Co. Road Com., Cadillac, $19,758; cement $8,364; grading and gravel surfacing 32,917 sq.yd. State Trunk Line Rd. 54-7, Newago Co., from New Era Road Bldg. Co., New Era, $49,214. cement furnished by state. Noted June 28 and July 5.

Ill., Urbana—Champaign Co., constructing (1) 6.345 mi. Sect. 33-15 D, Routes 4 and 4-A (2) 7.84 mi. Sect. 34-15 D, Routes 4 and 15 (3) 8.335 mi. Sect. 35-15 D, Route 1 (4) 6.807 mi. Sect. 36-15 D, Route 17 (5) 14.285 mi. Combination A, Sects. 33 and 34-15 D, from R. G. Flaugher, 1105 South Race St., (1) $99,161 (2) $124,153; Verhey Constr. Co., Champaign, (3) $141,362 (4) $129,061 (5) $228,301. Noted July 12.

Ia., Jefferson—Greene Co., 8 in. rein.-con. paving (1) 21,134 sq.yd. in Scranton (2) 16,123 sq.yd. in Grand Junction, from Empire Constr. Co., 308 Flynn Bldg., Des Moines, (1) $2.45 (2) $2.34. Noted July 5.

Missouri — State Hy. Dept., Jefferson City, July 6, constructing roads (**14-75-Franklin means Route 14, Sect. 75, Franklin Co.**) 4.98 mi. **14-75-Franklin**, from E. Berns & Co., Indianapolis, Ind., $225,853; 2.358 mi. **94-5-St. Charles**, from J. P. Sparks, Kirkwood, $18,678; 0.453 mi. **3-36-Lafayette**, from A. J. Gosby, Leeds, $20,155; 2.443 mi. **25-16-Perry**, from Kiefner & Gille, Perryville, $27,133; 5 mi. **8-69-Marion** from J. C. Lyle, 609 Grand Ave., Kansas City, $30,497; 1.186 mi. **32-30-St. Francois**, and 1.799 mi. **32-23-Iron**, from M. E. Gilloz, Monett, $18,462 and $23,546 respectively; **State Project Route 63A**, Ralls Co., and 2.047 mi. **22-18-Pike**, from F. F. O'Dell, Center, $27,066 and $25,158 respectively. Noted June 28.

Mo., St. Louis—Bd. Pub. Serv., concrete paving various alleys (**C. B. 847 means City Block 847**) from Eyerman Constr. Co., 1216 South Grand Ave., 720 sq.yd. **C. B. 817** $2,587, 670 sq.yd. **C. B. 1044** $2,227, 610 sq.yd. **C. B. 1525** $1,647, 1,220 sq.yd. **C. B. 2811** $3,191, 980 sq.yd. **C. B. 2821** $2,358, 1,075 sq.yd. **C. B. 1357** $3,714, 950 sq.yd. **C. B. 2814** $2,435, 1,215 sq.yd. **C. B. 2808** $3,167; from Skrainka Constr. Co., Security Bldg., 610 sq.yd. **C. B. 1525** $1,647, 1,335 sq.yd. **C. B. 5568** $3,385, 1,190 sq.yd. **C. B. 21818** $3,540, 2,755 sq.yd. **C. B. 4498** and **C. B. 4499** $7,473; from W. Hoffner, 715 South Vandeventer St., 1,355 sq.yd. **C. B. 4446W** $3,673, 1,840 sq.yd. **C. B. 4448W** and **4449B** $5,236; from Blackburn-Crean, Syndicate Trust Bldg., 1,755 sq.yd. **C. B. 5164** $4,447, 1,095 sq.yd. **C. B. 3272W** $3,003, 1,000 sq.yd. **C. B. 4071E** $2,562, 925 sq.yd. **C. B. 49248** $2,670, 1,820 sq.yd. **C. B. 5534** $4,779; from J. E. Perkinson, 3237 Carter Ave., 580 sq.yd. **C. B. 2407** $1,828, 4,316 sq.yd. **C. B. 3873** $11,502.

Tex., Edinburg—Hidalgo Co. from W. L. Pearson & Co., 827 1st Natl. Bank Bldg., Houston, grading and surfacing with concrete base 9.65 mi. Federal Aid Project 375, 18 ft., $240,233, surfacing same road with 97,048 sq.yd. 1 in. cold rock asphalt topping $53,862, grading, surfacing with concrete base constructing rein.-con. and timber pile trestle bridges, etc., on 13.74 mi. Federal Aid Project 374, 18 ft., $365,784, surfacing with 134,489 sq.yd. 1 in. cold Uvalde rock asphalt topping $75,536, grading and gravel surfacing (gravel to be furnished by county) 14.81 mi. Federal Aid Project 376, 18 ft. $102,409.

Tex., Falfurrias — Brooks Co., grading, gravel and caliche surfacing 10.08 mi. State Highway 12, 790 cu.yd. concrete, 60,187 cu.yd. roadway and 20,406 cu.yd. borrow excav., from W. W. Vann, Mercedes, $70,614; 18,126 cu.yd. gravel and 18,126 cu.yd. caliche, furnished by county $35,000. Engrs. est. $131,250. Noted July 19.

Tex., Ft. Davis—Jeff Davis Co., grading and building structures on 6.07 mi. State Highway 12, 18,165 cu.yd. earth, 1,250 cu. yd. loose rock and 1,000 cu.yd. solid rock excav., 795.9 cu.yd. concrete, 72,143 lb. reinforcing, etc., from J. C. Bean, Marfa, $25,627.

Tex., Jasper—Jasper Co. grading and gravel surfacing 1.29 mi. State Highway 7, east from Jasper, 16 ft., and 6.06 mi. State Highway 7, between Jasper and Newton Co. line, 16 ft., from J. Thompson, San Augustine, $28,665 and $92,091 respectively. Noted July 5.

Wash., Anacortes—City Comn., 30,000 sq.yd. 6 in. concrete, from R. G. Stevenson, 1327 North 34th St., Seattle, $86,500. Engrs. est. $90,000.

Wash., Seattle—Bd. Pub. Wks., grading and paving 1st Ave. S., from R. G. Stevenson, 1327 North 34th St., 20,000 sq.yd. 8 in. concrete $2.05, 5,500 lin.ft. concrete curb $0.35, 125,000 cu.yd. earth excav. $0.38, total $209.221. Engrs. est. $115,188.

Wash., Seattle—Bd. Pub. Wks., July 6, paving Wilson Ave. et al., from J. L. Smith, Pioneer Bldg., 33,500 sq.yd. concrete $2.10, etc., total $262,691.

California—State Hy. Comn., Sacramento, asphaltic seal coat 7.54 mi. Federal Aid Project 28, Placer Co., from Healy-Tibbits Constr. Co., 64 Pine St., San Francisco, $12,874; grading and gravel surfacing 0.2 mi. highway near Lytton, Sonoma Co., from Tieslau Bros., Berkeley, $10,775. Noted June 21.

Calif., Inglewood—Improving Forest and Hawthorne Aves., 223,560 sq. ft. grading, etc., 142,323 sq. ft. 5 in. macadam, 7,373 ft. curb, etc., to W. D. McCray, Amer. Bank Bldg., Los Angeles, $33,805.

Calif., Modesto—From Standard Paving Co., 1411 9th St., improving F St. between 16th and 17th Sts., 16,025 sq.ft. grading at $0.08 per sq.ft., 15,155 sq.ft. 1½ in. warrenite bitulithic on 2½ in. asphaltic concrete $0.17, etc.; Hackberry Ave., 84,767 sq.ft. grading $0.05, 79,129 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete $0.17, 5,638 sq.ft. concrete gutter $0.20, 2,620 lin.ft. concrete curb $0.70, etc. Noted June 7.

CONTRACTS AWARDED

Massachusetts—State Hy. Comn., Boston, resurfacing 30,000 sq.yd. Memorial Dr., to J. H. Fannon, 28 Hinckley St., Somerville, $42,950.

Connecticut—State Hy. Dept., Hartford, to J. Arborio, 82 Church St., New Haven, paving 18,850 sq. yd. Southbury Rd., 3 in. bituminous macadam, etc., $44,639, engrs. est. $40,041, 36,900 sq. yd. Bethlehem Rd., 8 in. native stone, $30,214, engrs. est. $31,225; to Lane Constr. Co., 37 Colony St., Meriden, 51,000 sq. yd. road in Sharon and

Streets and Roads (Continued)

Salisbury, 7 in. macadam, $300,544, engrs. est. $316,552. Noted July 12.

New Jersey—State Hy. Dept., Trenton, paving Chatham-Brantwood Sect. of Route 5, to R. San Giovanni, 5 Hoyt St., Newark, $164,426.

N. J., Keyport—T. L. Smith, mayor, and Boro Council, asphalt paving ¼ mi. Maple Ave., to L. J. Seiling, Broad St., Red Bank, $27,705. Noted June 28.

N. J., New Brunswick—Paving Alexander, Delavan, Morrell, High, Central, Schuyler and Delafield Sts., 4 of above streets, to Utility Constr. Co., 5 Spring St., $63,293; 3 streets, to T. H. Riddle, 102 Church St., $44,055.

N. J., Plainfield—Common Council curbing, guttering, laying sewers and bituminous macadam pavements, to J. F. Burke, 309 Park Ave., $72,851. Noted June 28.

Pennsylvania — State Hy. Dept. Harrisburg, rebuilding 3 mi. road between Buckingham and Doylestown, Bucks Co., concrete, to W. C. Guncheon & Co., Smethport, $78,426.

Pa., Erie—Paving Shore, Shawnee and Seminole Drives to M. A. McCormick, Erie, $3.15 per sq.yd., Frontier and Mohawk Drives, to J. and M. Doyle Constr. Co., Erie, $3.15 per sq.yd. Above work involves 57,672 sq.yd. asphalt on concrete. Engrs. est. $250,000. Noted July 5.

Pa., Greensburg—Westmoreland Co., rein.-con. paving 2¼ mi. Herminie Rillton Rd., Sewickley Twp., 16 ft., to R. H. Cunningham Sons Co., Turtle Creek. $122,838.

Pa., Grove City—Paving Hillcrest and Kinder Aves., 2nd and Poplar Sts., 6260 sq. yd. paving, 5680 lin. ft. curb and gutter, 3800 sq.yd. bituminous surface, etc., to W. McIntyre & Son, Sharon, $28,419.

Pa., Mt. Lebanon—Improving Lebanon Hills Dr., 10,000 cu. yds. grading, 5,263 sq. yds. brick on cement sand filler, to Diulus & Benintend, Hargrove St., Pittsburgh. Engrs. est. $30,000.

Pa., Pittsburgh—Paving Dakota, Bryn Mawr and Alfena Sts., vitr. brick, to North Side Constr. Co., 6939 Hamilton Ave. $70,911.

Md., Baltimore—Bd. Awards, 11,330 sq. yd. old granite block redressed and relaid, Contr. 240-NA, to G. Long Contg. Co., 1st Ave. and 12th St., $59,280. Noted July 12.

W. Va., Fairmont—Marion Co., concrete paving 17,846 ft. Morgantown Rd., Winfield Dist., to Rogers & Shumway, Worthington, $85,768. Noted June 21.

North Carolina—State Hy. Comn., Raleigh, clearing, grading and topsoiling 18.93 mi. State Project 141, Edgecombe and Halifax Counties, to J. P. Dicus, Robersonville, $128,143, 16.3 mi. State Project 168, Northampton Co., to N. L. Teer, Durham, $97,482; grading and asphaltic concrete paving 3.54 mi. State Project 672, Rowan Co., to Stearns Bros., Inc., Statesville, $121,-983, 5.83 mi. State Project 837B, Henderson Co., to Dixon Contg. Co., Real Estate Bldg., Savannah, Ga., $75,533; grading and concrete paving 3.82 mi. State Project 438, Harnett Co., to J. M. Gregory & Co., Pittsboro, $130,657, 9 mi. State Project 293, Wilson Co., 5.4 mi. State Project 230, Greene Co. and 5.3 mi. State Project 189, Greene and Pitt Counties, to Smith Bros., Inc., 308 Sumpter Bldg., Dallas, Tex., $311,-645, $190,076 and $178,903, respectively; grading 5.68 mi. State Project 802, Avery Co., to Hughes & Ray, Newland, $94,301, 6.49 mi. State Project 702B, Alleghany Co., to Turner-Hartsoe Constr. Co., Warrensville, $76,711; clearing and grading 3.83 mi. State Project 608B, Anson Co., to B. F. Teeter, Harrisburg, $29,941, 9.1 mi. State Project 836, Henderson Co., to J. B. Hawkins, 310 South Cedar St., Charlotte, $57,-537, 4.89 mi. State Project 812, Burke Co., to M. A. Kollock, Morganton, $52,531; clearing, grading, topsoiling and rein.-con. structures on 11.58 mi. State Project 464, Person Co., to Michaux Constr. Co., Morganton, $77,697; grading and asphaltic macadam paving 3.07 mi. State Project 556, Montgomery Co., to J. F. Mulligan Constr. Co., North Wilkesboro, $71,631; grading and waterbound macadam paving 10.43 mi. State Project 213, Craven Co., to Eagle Eng. Co., New Bern, $221,924; asphaltic concrete surfacing 10.43 mi. State Project 213, Craven Co., to F. J. McGuire, Paul-Gale-Greenwood Bldg., Norfolk, Va., $126,-201; grading, topsoiling and rein.-con. structures on 3.83 mi. State Project 431, Granville Co., to Michaux Constr. Co., Morganton, $38,346. Noted July 12.

N. C., Rutherfordton—See "Sewers."

N. C., Spencer—Curbing, guttering, asphaltic paving on concrete, etc., to R. G. Lassiter & Co., Citizens' Natl. Bank Bldg., Raleigh, $200,000.

Florida — State Rd. Dept., Tallahassee, sheet asphalt surfacing 7.962 mi. road from Paynes Prairie to Marion Co. line, 30 ft., Alachua Co., to W. P. McDonald Constr. Co., Tampa, $302,609. Noted July 12.

Fla., Madison—Madison Co., to R. S. Adams, Jasper, sand-clay surfacing 26.2 mi. Rds. 2 and 5, $30,448, Rd. 7, $20,206; to Bryson Livestock Co., Jacksonville, sand-clay surfacing Rd. 9, $17,815. Noted Mar. 29.

Miss., Houston—Chickasaw Co., grading, gravel surfacing and bridging various roads, to Tate & Co., Brooksville, $42,585. Noted July 5.

Miss., Starkville—Oktibbeha Co. paving 1.736 mi. Federal Aid Project 144, Kentucky rock asphalt on crushed stone or slag binder course, to F. D. Harvey & Co., Memphis, Tenn., $26,124.

Louisiana — State Hy. Comn., Baton Rouge, grading and gravel surfacing 9.36 mi. Abbeville-New Iberia Highway, Vermillion Parish, to Burke & Jones, New Iberia, $77,692. Noted June 7.

Tennessee — State Hy. Dept., Nashville, grading and bituminous macadam surfacing 10 mi. highway between Springfield and Davidson Co. line, to Texas Rd. Constr. Co., Great Southwestern Life Bldg., Dallas, Tex., $147,658; oil surface treatment on 5.1 mi. highway between Tullahoma and Moore Co. line, Coffee Co., to B. Williams, Murfreesboro, $45,493. Noted July 12.

Tenn., Martin—Graveling, asphaltic oil and rock asphalt surfacing 10 mi. various streets, to Murphy & Hall Constr. Co., Martin, $167,889. Noted July 5.

O., Akron—W. F. Peters, dir. Pub. Serv. grading, laying sidewalks and paving 5,000 sq.yd. Noah Ave., Mexican Asphalt, to Columbus Asphalt Paving Co., 304 Buckeye Bldg., $41,187. Engrs. est. $46,898.

O., Bellaire—Grading, extending water mains and paving Washington St., to A. and O. Holderman, 2222 Chapline St., Wheeling, W. Va., $49,300. Noted July 19.

O., Canton—Bd. Control paving ¾ mi. Orchard Ave. N. E., 20 ft., and Winfield Way N. E., 20 ft., both brick, to Burd Constr. Co., Genl. Del., $31,000 and $38,000 respectively, engrs. est. $32,821 and $39,360 respectively; about 1 mi. Arlington Ave. N. W., 20 ft., asphalt, to Garaux Bros. Co., Genl. Del., $45,000, engrs. est. $48,000.

O., Canton—Stark Co. improving 1.5 mi. Whipple Rd., rein.-con., to Garaux Bros., 735 Market Ave. S., $55,856. Engrs. est. $57,500.

O., Cleveland Heights (Warrensville P. O.)—Asphalt paving Quilliams Rd., to H. G. Herring, Pavers Exch., Cleveland, $48,-543; Oxford Rd., to Rieley Bros., The Arcade, Cleveland, $41,936; Summit Park and Montford Rds., to Spence Bros., 2078 Random Rd., Cleveland, $41,050; Woodridge Rd., to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $38,873. Noted June 21.

O., Columbus — W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving 727 ft. Charles St., 40 ft., asphalt, to B. F. Patterson, 1214 Nell Ave., $9,987; 2,812 ft. Leonard Ave., 36 ft., asphalt, to Knight & Wells, 483 Oak Ct., $39,761; 408 ft. alley west of Douglas St., 20 ft., concrete, to R. J. Dienst, 480 South 5th St., $2,610; 655 ft. alley west of Miller Ave., 15 ft., 491 ft. alley north of Mt. Vernon Ave., 16 ft., and 699 ft. 2nd alley north of Leonard Ave., 20 ft., all concrete, to Yale Constr. Co., 146 Yale Ave., $3,391, $2,546 and $3,534 respectively; 2,275 ft. alley west of Oakwood Ave., 20 ft., concrete, to Columbus Constr. Co., 1471 West Broad St., $11,232. Noted July 12.

O., Dover—Resurfacing about ¾ mi. Factory and 3rd Sts., also about ½ mi. East 11th St., 2½ in. sheet asphalt, to Federal Asphalt Paving Co., Genl. Del., Hamilton, $27,945 and $27,663 respectively. Engrs. ests. $28,111 and $28,391 respectively. Noted May 17.

O., Martins Ferry—Grading and paving Washington St., to Holderman Bros. Co., Wheeling, W. Va., $47,330.

O., Warren—Paving South Main St., brick on 7 in. concrete, to F. George, Genl. Del., Youngstown, $147,243. Engrs. est. $165,000.

Indiana—State Hy. Comn., Indianapolis, grading 8.269 mi. Project 34D and 42A, Spencer and Perry Counties, to Van Hay Constr. Co., Loogootee, $70,067; 7.292 mi. Project 42D, Crawford Co., to R. W. Martin, Evansville, $67,057; 5.002 mi. Project 59, Scott Co., to Kelly & Young, Frankfort, $80,747. Noted June 21.

Ill., Chicago—South Park Comrs., 57th St. and Cottage Grove Ave., to R. F. Conway Co., 133 West Washington St., paving drives in Sherman Park $50,124, paving West Drive in Grant Park and extension of Roosevelt Rd., $189,371.

Ia., Creston — To Des Moines Asphalt Paving Co., 2nd St. and New York Ave., Des Moines, 15,915 sq.yd. 5 in. bituminous concrete paving 1½ aggregate with fine mixture surfacing coat $2.83, 16,569 sq.yd. sheet asphalt $2.67, etc., total $91,670; to F. O. Akin, Corning, 1,524 sq.yd. one course concrete alley paving $2.30, 26,972 ft. 42 in. combined curb and gutter $1.13, storm sewers, intakes, etc., total $36,241; to Western Asphalt Paving Corp., 1st and Nebraska Sts., Sioux City, 9,495 sq.yd. sheet asphalt resurfacing $1.44, total $13,673. Noted July 12.

Ia., Des Moines—Polk Co. paving, etc., road from here to Warren Co. line, to Koss Constr. Co., Ames, 29,506 sq.yd. concrete $2.55 per sq.yd., 24,231 cu.yd. earth excav. $0.50, etc.

Ia., Garner—Hancock Co., grading 11.07 mi. road between Britt and Kanawha, to A. L. Cook, Ottawa, Kan., $0.23 per cu.yd. total $32,752; tiling to A. Nelson, Garner 6 in. tile $0.104, 8 in. $0.14, 10 in. $0.22, total $9,997.

Ia., Valley Junction—For 13,700 sq.yd. 6 in. reinforced vibrolithic pavement, to Empire Constr. Co., 308 Flynn Bldg., Des Moines, $2.60.

Minn., Faribault — Rice Co., Job 2312, State Rd. 22, grading to M. J. Nolan Constr. Co., 260 Temple Court, Minneapolis, $22,-566, corrugated metal culverts to Northfield Iron Co., Northfield, $1,686; Job 2316, State Rd. 28, grading to Weires & Mielke, Rice St. and Crosby Rd., St. Paul, $11,931, corrugated metal culverts to Northfield Iron Co., Northfield, $1,572; Job 2309, State Rd. 48, grading to Nolan Bros., 1st North 2nd St., Minneapolis, $12,612, concrete culverts to Elk River Concrete Products Co., Elk River, $1,381; Job, 2312, State Rd. 30, grading to J. Brown, Madison Lake, $17,757, corrugated metal culverts to Lyle Culvert Co., 171 27th Ave. S.E., Minneapolis, $3,407. Noted June 21.

Kan., Holton—Paving various streets, to E. S. McCandless, Topeka, 3,100 cu.yd. grading $0.90, 4,400 ft. 6 in. curb and gutter $0.85, 6,800 sq.yd. 3 in. vertical fibre on 5 in. base $3.16, etc., total $32,443. Noted June 14.

South Dakota—State Hy. Comn., Pierre, grading 8.51 mi. Federal Aid Project 146A, Corson Co., to H. J. Hawley, Trail City, $34,489. Noted June 21.

N. D., Grand Forks—Rein.-con. paving 8,563 sq.yd. in Dist. 10-18, Project 1039, and 5,414 sq.yd. Dist. 17, Project 1041, to Northern Constr. Co., Grand Forks, $30,000.

Wyo., Casper—Paving, sewers and water mains (1) 7,724 sq.yd. Paving Dist. 28 and 4,724 sq.yd. Paving Dist. 33, to Warren Constr. Co., Caspar, (1) $21,410 (2) $8,457. Noted July 12.

Wyo., Sheridan—Paving Wyoming Ave., Summer, Illinois, East Loucks, East Works, East Burkitt, Park, Jefferson, Dow and Gould Sts., warrenite bitulithic, to Warren Constr. Co., Park Rose, Portland, Ore., bitulithic base $148,517, or concrete base $156,123. Engrs. est. $175,000. Noted June 21.

Missouri—State Hy. Dept., Jefferson City, constructing roads **(6-17-Daviess means Route 6, Sect. 17, Daviess Co.)**, 5 mi. **6-17-Daviess**, to Western Bridge Constr. Co., 750 Peters Trust Bldg., Omaha, Neb., $73,084; 5 mi. **33-8-Clinton**, to J. C. Lyle, 609 Grand Ave., Kansas City, $32,084; 3.798 mi. **3-8-Mercer**, to J. L. Simmons, La Plata, $30,091; **43-9**, 4.449 mi. **43-10**, and **43-6-Stope Co.**, to M. E. Gillioz, Monett, $40,037, $23,676 and $41,196 respectively; 0.39 mi. **15-21-Shelby**, to Pan Amer. Bridge Co., Moberly, $6,329; 4.922 mi. **19-21-Dent**, to General Constr. Co., Syndicate Trust Bldg., St. Louis, $25,883; **1-96-Jasper**, and 4.332 mi. **1-91-Barton**, to Carterville Constr. Co., Carterville, $5,386 and $44,841 respectively. Noted July 19.

Mo., St. Louis—Bd. Pub. Serv., paving 9,530 sq.yd. 12th Blvd. and 4,160 sq.yd. Soulard St., both trinidad asphalt, to Central Paving Co., Fullerton Bldg., $57,679 and $27,437, engrs. est. $48,800 and $21,000 respectively; 21,100 sq.yd. Forest Park Blvd., asphalt, to Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., $50,932, engrs. est $37,400; 1,425 sq.yd. Tennessee Ave., 2,355 sq.yd. Wiesehahn Ave., both asphalt, and 1,955 sq.yd. Elenore Ave., asphaltic concrete, to Bridges Asphalt Paving Co.,

Streets and Roads (Continued)

Arcade Bldg., $8,186, $14,484 and $12,266 respectively; engrs. est. $6,450, $10,200 and $8,200 respectively.

Tex., Abilene—Paving 29,000 sq.yd. Pine St. and 6,000 sq.yd. Chestnut St., warrenite bitulithic on black base, to West Texas Constr. Co., Cotton Exch. Bldg., Ft. Worth, $2.50 and $2.52 respectively. Noted June 21.

Tex., Hondo—Medina Co., asphalt surfacing 13.44 mi. State Highway 2, 18 ft., to Colglazier & Hoff, Terrell and Verbena Rds., San Antonio, $61,163. Noted Apr. 26.

Tex., Navasota—For 43,000 sq.yd. of 6 in. concrete, to Smith Bros., Sumpter Bldg., Dallas, $90,000. Engrs. est. $85,000. Noted May 24.

Tex., Paris—Lamar Co., concrete surfacing 2.41 mi. Bates Sect. State Highway 5, 25,535 cu.yd. concrete, 30,257 cu.yd. roadway and 63, 764 cu. yd. borrow excav., to J. C. Field Co., Denison, $67,156. Engrs. est. $78,200.

Oklahoma—State Hy. Dept., Oklahoma City, grading and concrete paving 2.93 mi. road east from Ardmore, Federal Aid Project 89, Carter Co., 18 ft., to Southern Constr. Co., Durant, 31,200 sq. yd. paving at $2.35 per sq. yd., etc., total $84,091; 3.84 mi. road from Hartshorne to county line, Federal Aid Project 81, Pittsburg Co., 18 ft., to Smith Bros., 308 Sumpter Bldg., Dallas, Tex., 40,550 sq. yd. paving at $2.50, etc., total $170,114; 5.66 mi. road from McAlester to Crowder, Federal Aid Project 80, Pittsburg Co., 18 ft., to Green Beekman Co., 1st Natl. Bank Bldg., Oklahoma City, 60,000 sq. yd. paving $2.42, etc., total $116,870; 7.42 mi. road from Savanna to Kiowa, Federal Aid Project 79, Pittsburg Co., 18 ft., to Gibson & Mitchell, Pauls Valley, 78,360 sq. yd. paving $2.53, etc., total $230,756; 6 mi. road from Bartlesville to Ramona, Federal Aid Project 15, Washington Co., 18 ft., to Hamilton Constr. Co., Bartlesville, 63,375 sq. yd. paving $2.56, etc., total $199,104.

New Mexico—State Hy. Comn., Santa Fe, grading and surfacing Willard-Mountainair Rd., Federal Aid Project 43, Torrance Co., to Fuqua & Gonzales, Las Cruces, $15,303; 12.321 mi. Mountainair-Scholle Rd., Federal Aid Project 77, Torrance Co., to Standard Eng. & Constr. Co., Ernest & Cranmer Bldg., Denver, Colo., $88,096; 3.099 mi. French-Springer Rd., Federal Aid Project 91-B, Colfax Co., to G. B. Bent, Roswell, $31,090; 10.523 mi. Capulin-Des Moines Rd., Federal Aid Project 94, Union Co., to N. Hanson, Cimarron, $75,501; 0.721 mi. East Central Ave. extension east of Albuquerque, Federal Aid Project 118, Bernalillo Co., to New Mexico Constr. Co., Knights of Pythias Bldg., Albuquerque, $51,904; 5.871 mi. Alameda-Bernalillo Rd., Federal Aid Project 36, Sandoval Co., to Lee Moor Contg. Co., Two Republics Bldg., El Paso, Tex., $163,168. Noted June 28.

Ark., Hot Springs—Paving several blocks Valley St., 6 in. concrete, 30 ft., to E. B. Mooney, Hot Springs, $30,000.

Ark., Newport—Improving Dist. 8, 8,000 sq.yd. sheet asphalt, 5,000 lin.ft. curb and gutter, Dist. 7, 26,420 sq.yd. pavement, 8,320 cu.yd. sub grading, 8,590 lin.ft. curb and gutter, 2,450 lin.ft. 10 and 12 in. vitr. pipe, etc., to Donathan McClanahan Contg. Co., Homer, La., $123,000.

Idaho — State Hy. Dept., Boise, paving 10.33 mi. North and South Highway, Lewis Co., Evergreen Highway Dist. to F. A. Dole, Lewistown, 10,100 cu.yd. broken stone surfacing $2.20, 36 cu.yd. class B concrete $27.50, total $25,501.

Utah—State Rd. Comn., Salt Lake City, to Gray & Murdock, Dooley Bldg., Salt Lake City, concrete paving and small drainage structures on 3 mi. road from Salina to Redmond, Federal Aid Project 52, Sevier Co., $51,254, 1.5 mi. Main St. in Salina, Federal Aid Project 44, Sevier Co., $25,553; concrete paving, gravel shoulders and drainage structures on 1.5 mi. road from Richfield to Elsinore, Federal Aid Project 43, Sevier Co., $36,583. Noted June 21.

Arizona—State Hy. Dept., Phoenix, grading and one course concrete paving Phoenix-Wimkenburg Highway, Federal Aid Project 20, to Lee Moor Contg. Co., Two Republics Bldg., El Paso, Tex., 41,024 sq.yd. pavement, $2.20, etc., total $123,409.

Washington—State Hy. Comn., Olympia, grading and gravel surfacing 6.9 mi. State Rd. 10 from Riverside to Omak, Okanogan Co., to Payne & Hewitt, Spokane, $52,620; 11,590 cu.yd. crushed rock surfacing State Rd. 3, from Pomona to Selah, Yakima Co., to Grant, Smith & Co., Henery Bldg., Seattle, $25,034. Noted June 28.

SUBWAY—ROCHESTER, N. Y.

Following are lowest three bids opened May 9, by Bd. Contr. & Supply, City Hall, for 4 track rapid transit railway, Contr. No. 2, (A) I. M. Ludington's Sons, 124 Powers Bldg., (awarded contract); (B) Empire Eng. Co.; (C) A. Friederich Sons Co. The unit bids were as follows:

	A	B	C
230,000 cu.yd. earth excavation in grading	$1.40	$1.10	$1.50
9,000 cu.yd. earth excavation in trenches and pits	2.00	2.50	1.80
21,000 cu.yd. rock excavation in trenches and pits	3.50	2.75	4.75
3,000 cu.yd. rock excavation in grading	6.00	7.00	7.00
14,000 cu.yd. lock and bridge masonry excavation	5.00	3.50	7.00
20,000 cu.yd. forming embanking	.60	.40	.23
500 cu.yd. cut stone masonry	25.00	80.00	70.00
2,000 cu.yd. slope walls and paving in place	18.00	9.00	8.93
100 cu.yd. brick masonry in place	25.00	60.00	24.00
300 cu.yd. class "A" concrete in place	30.00	35.00	25.00
4,000 cu.yd. class "B" concrete in place	21.00	30.00	20.00
9,800 cu.yd. class "C" concrete in place	12.00	18.00	14.50
1,200 cu.yd. class "D" concrete in place	10.00	13.00	11.00
20,000 lin.ft. line drilling	.35	.40	.27
1,000 lin.ft. jackhammer drilling	.30	.40	.30
1,100 lin.ft. 4-in. galvanized iron weepers	.50	.40	1.50
800 lin.ft. concrete railing	15.00	20.00	6.07
2,000 sq.ft. granolitic finish	.35	1.50	.17
2,000 sq.ft. granolitic finish, tooled	.50	1.70	.77
50 M.Ft.B.M. timber, for temp. br. and walls, in place	90.00	140.00	93.50
20 M.Ft.B.M. sheeting and bracing, in place	60.00	120.00	104.00
20 M.Ft.B.M. timber in place underpinning walls	100.00	120.00	104.00
116,000 lb. structural steel in place	.07	.07	.07
375,000 lb. metal reinforcement in place	.05	.05	0.0595
2,000 lb. iron castings in place	.08	.10	.104
1,500 lin.ft. 24-in. vitrified pipe sewer in place	3.00	3.75	3.12
1,100 lin.ft. 20-in. vitrified pipe sewer in place	2.20	3.50	2.19
1,700 lin.ft. 15-in. vitrified pipe sewer in place	1.50	2.00	1.46
6,800 lin.ft. 12-in. vitrified pipe sewer in place	1.00	1.75	1.21
2,200 lin.ft. 8-in. vitrified pipe sewer in place	.60	1.10	.85
1,500 lin.ft. concrete cradle for 24-in. sewer in place	1.80	2.50	2.96
1,100 lin.ft. concrete cradle for 20-in. sewer in place	1.60	2.00	2.37
1,700 lin.ft. concrete cradle for 15-in. sewer in place	1.00	1.60	1.93
6,800 lin.ft. concrete cradle for 12-in. sewer in place	.75	1.30	1.47
2,200 lin.ft. concrete cradle for 8-in. sewer in place	.50	1.00	1.00
5 "Y" branches for 24-in. vitrified pipe laid	6.00	10.00	11.00
5 "Y" branches for 20-in. vitrified pipe laid	5.00	7.00	7.50
5 "Y" branches for 15-in. vitrified pipe laid	2.50	4.00	5.00
5 "Y" branches for 12-in. vitrified pipe laid	2.00	3.00	4.00
5 "Y" branches for 8-in. vitrified pipe laid	1.50	2.00	2.25
51 sewer manhole not exceeding 8 ft.	100.00	100.00	120.00
100 lin.ft. sewer manhole exceeding 8-ft. having 8-in. walls	12.00	10.00	11.25
125 lin.ft. sewer manhole exceeding 8-ft. having 12-in. walls	18.00	15.00	15.60
10 surface sewers complete in intersect, St.	40.00	50.00	40.00
10,000 sq.ft. paint waterproofing in place	.05	.10	.05
4,700 sq.yd. preparation, subgrade, pavement intersect, St.	.25	.30	.32
1,500 sq.ft. preparation, subgrade, sidewalk, intersect, St.	.05	.03	.03
1,800 lin.ft. 5-in. medina stone curb in place	1.75	2.00	2.00
200 lin.ft. medina stone curb reset	1.10	1.00	1.10
2,000 lin.ft. 4-in. vitrified pipe tile under curb in place	.25	.25	.62
2,500 sq.yd. 2-in. asphalt wearing surface	1.50	1.40	1.30
2,500 sq.yd. asphalt binder course	.50	.35	.32
1,000 sq.yd. medina stone pavement wearing surface	5.00	4.00	6.00
1,200 sq.yd. brick pavement wearing surface	3.00	3.00	4.50
1,000 sq.yd. 1-in sand cushion, med. stone pavement	.10	.13	.12
1,200 sq.yd. 1-in cement sand cushion, brick pavement	.25	.33	.30
1,200 sq.ft. single course cement walks	.25	.25	.25
1,500 sq.ft. sidewalk relaid	.10	.13	.10
10 removing trees	25.00	25.00	12.00
2,700 gross ton rails delivered	60.00	58.00	58.97
6,600 pair splice bars delivered	1.85	2.00	1.87
33,000 lb. track bolts delivered	.06	.07	.06
27,000 nutlock delivered	.02	.02	.024
265,000 lb. track spikes delivered	.06	.045	.0394
94,000 tie plates delivered	.50	.26	.40
6,700 rail joint plates delivered	2.70	1.60	1.50
7,000 rail braces delivered	.40	.66	.581
5,000 rail braces installed	.15	.10	.151
7,000 anti-creepers delivered	.40	.40	.321
5,000 anti-creepers installed	.15	.05	.151
215 gross ton guard rails delivered	96.00	106.00	64.50
10,000 lin.ft. guard rails installed	1.30	.55	.95
46 switches delivered	105.00	177.00	103.50
51 switches installed	100.00	90.00	59.00
17 no. 7 double spring frogs delivered	120.00	167.00	163.50
17 no. 9 double spring frogs delivered	130.00	168.00	169.00
15 no. 7 single spring frogs delivered	110.00	115.00	158.00
16 no. 9 single spring frogs delivered	120.00	116.00	163.50
31 frogs installed	50.00	35.00	47.30
10 derails complete in place	50.00	75.00	40.00
42,000 cu.yd. ballast in place	2.40	3.85	3.83
50,000 track ties delivered	2.75	2.90	3.11
61,000 lin.ft. track laying tangents curves rad. 2,000 ft.	1.40	1.40	1.40
4,700 lin.ft. tracklaying curves 700 ft. to 2,000 ft.	1.50	1.60	1.55
13,000 lin.ft track laying curves rad. 700 ft. or less	1.60	1.80	1.72
700 lin.ft. station covers	20.00	15.00	30.56
400 lin.ft. stairway covers	40.00	40.00	23.52
900 lin.ft. metal handrailing	2.70	1.50	7.20
111 catch basins in track drains complete	40.00	40.00	56.00
5,000 lin.ft. fencing complete in place	1.00	1.25	.75
300 cu.yd. cinder fill under walks	2.50	1.50	2.70
250 safety treads for stairways	5.00	7.00	5.90
160 M.Ft.B.M. treated timber for switches	125.00	120.00	93.50
200 cu.yd. rubble masonry (lump sum)	12.00	7.00	9.13
1 clearing (lump sum)	3,000.00	500.00	500.00
1 bailing and draining (lump sum)	5,000.00	5,000.00	1,000.00
1 care of surface drainage and sewage (lump sum)	4,000.00	2,000.00	200.00
1 maintaining street traffic (lump sum)	4,000.00	5,000.00	700.00
5 removing bridges (lump sum)	2,000.00	1,000.00	3,000.00
Extended totals	$1,654,765	$1,723,469	$1,797,576

Wash., Bellingham—Bellingham Bay Improvement Co., Elk and Holly Sts., paving 5,000 ft. Sunset Dr., to Riddle & Hawkins, Bellingham, $31,000. Engrs. est. $32,000.

Wash., Montesano—Grays Harbor Co., improving 10 mi. Pacific Beach Highway west of Hoquiam, straightening old road grading and graveling, erecting 3 small bridges, to Peck & Einerson, Hoquiam, $36,933. Engrs. est. $40,000.

Wash., Seattle—Bd. Pub. Wks., to J. L. Smith, Pioneer Bldg., paving Sunnyside Ave. et al., 1,425 sq.yd. 5 in. concrete $1.55, 30,800 sq.yd. 6 in. $1.69, 3,570 sq.yd. 7 in. $1.98, etc., total $66,462; North 50th St. et al., 11,500 sq.yd. 6 in. concrete $1.70, etc., total $29,113.

Streets and Roads (Continued)

Ore., Portland — Paving Montana Ave. and East 55th St., Concrete, and East 40th St., concrete, asphaltic concrete and macadam, to Cochran Constr. Co., 415 South Syracuse St., $27,190. Engrs. est. $35,385.

California—Joint Highway Dist. 3 of Sacramento Co. (Sacramento) and Sutter Co. (Yuba City), constructing Garden Highway, 10.629 mi. Tudor Sect., to J. F. Knapp, Turlock, 14,551 cu.yd. 5 in. concrete at $11.50 per cu.yd., 14,831 cu.yd. earth fill $0.40, 10,972 cu.yd. excav. $1.40, etc., total $205,418; to V. R. Dennis Constr. Co., McMinnville, Ore., 8.188 mi. Verona Sect., 10,675 cu.yd. 3 in. asphaltic concrete, 2 in. surface, $15, 20,543 cu.yd. excav. $0.60, etc., total $172,750, 7.414 mi. Elkhorn Sect., 9,665 cu.yd. 3 in. asphaltic concrete, 2 in. surface, $15, 5,087 cu.yd. excav. $0.60, etc., total $148,327.

Calif., Los Angeles—To G. H. Oswald, 366 East 58th St., improving San Pedro St. between 61st and Mariposa Sts., lump sum for grading $14,500, 462,330 sq.ft. concrete pavement $0.217, 7,260 sq.ft. walks $0.20, etc., total $136,236; to Jahn & Bressi, Byrne Bldg., improving Hill St. between Washington St. and Santa Barbara Ave., lump sum for grading $35,000, 1,946 sq.ft. asphalt pavement $0.35, 589,337 sq.ft. 8 in. concrete $0.30, 1,950 sq.ft. bituminous base $0.25, 184,810 sq.ft. concrete walks $0.20, etc., total $283,750.

Calif., Yuca City — Sutter Co., to Galbraith & Janes, Yuba City, improving Bunce Lateral, Contr. 25, 9,000 sq. yd. grading at $0.21 per sq. yd., 700 cu. yd. concrete $15, total $12,390; to Heafey, Moore & McNair, 2030 High St., Berkeley, asphaltic macadam surface, etc., contr 26, 56,000 sq. yd. grading $0.10, 27,000 sq. yd. base rock $0.555, 29,000 sq.yd. surface $0.44, 10,000 sq. yd. patching $0.70, 150,000 sq. yd. resurfacing $0.135, total $60,595.

Ontario—Dept. Pub. Wks., 110 University Ave., Toronto, Contr. 915 1.75 concrete pavement at Amherstburg to L. Pettypieces, Amherstburg, $50,000; Contr. 1000, 4.4 mi. concrete paving at Burlington Beach to Grant Constr. Co., 50 Front St. E, Toronto, $100,000; Contr. 1,004, 3.2 mi. macadam base from Crofton and Bloomfield, to C. Bryson, Brockville, $35,000; Contr. 1,007, concrete bridge abutments Dodds Creek Bridge at Lambeth, to J. Vance, Woodstock, $15,000; Contr. 1,008, 4.1 mi. grading Main St. to Hamilton City limits, to Nicholson & Bohan, West Monkton, $10,000; Contr. 1009, 4 mi. asphaltic concrete paving on macadam from Whilky to Oshawa, 30 ft., to Johnson Bros., Brantford, $150,000; Contr. 1010, Cayugee Bridge abutments, concrete, to Canadian Eng. & Contg. Co., Hamilton, $15,000.

Ont., Hamilton — Wentworth Suburban Rds. Comn., concrete paving 10,000 sq.yd. in Barton and Binbrook Twps., to Hamilton Contg. Co., Home Bank Bldg., $30,000.

Ont., Ottawa—Paving Wellington St., 22,000 sq.yd. asphalt and wood block on concrete, to O'Learys, Ltd., Bank Nationale Bldg., $99,898.

Industrial Works

PROPOSED WORK

Mass., Brighton (Boston P. O.)—Corey Road Garage, Inc., 112 Corey Rd., having sketches made by J. H. Bickford Co., 6 Beacon St., Boston, 2 story, 106 x 300 ft. garage, brick and steel, Corey Rd.

Mass., Pittsfield—Smith & McCarthy having plans prepared by G. F. Haynes, 184 North St., 3 story, 35 x 60 ft. garage, brick and steel. $44,000.

Conn., Glenbrook—Norma Co. of America, Anable Ave., Long Island City, N. Y., plans 1 story, 100 x 400 ft., brick and steel factory, here. Architect not announced.

Conn., Middletown—Standard Oil Co. of New York, 26 Bway., New York City, plans distributing plant, 2 buildings, dock facilities, storage tanks, etc. $1,000,000.

Conn., Oakville—Oakville Co. had plans prepared by Lockwood, Greene & Co., 24 Federal St., Boston, 2 story, 70 x 120 ft. factory, brick, plain foundation. $40,000.

N. Y., Albany—J. D. Parsons, Inc., Hamilton St., plans rebuilding plant destroyed by fire. $100,000-$150,000. Engineer and architect not announced.

N. Y., Buffalo—W. Rixey, 1146 Niagara St., plans garage and repair shop, Niagara St. $40,000. Engineer and architect not announced.

N. Y., Dansville—Macomber Garage, Inc., plans modern garage and repair shop, Ossian St. $40,000. Engineer and architect not announced.

N. Y., Fort Miller—Fort Miller Pulp & Paper Corp. had plans prepared 1 story, 45x130 ft., rein.-con. and steel mill, plain foundation, Main St. $200,000. Private plans.

Pa., Bellefonte — Decker Bros., North Spring St., plan 3 story and basement, 90 x 120 ft., brick, concrete and steel garage, repair shop and supply station, High and Spring Sts. $75,000. M. Decker, pres. Architect not selected.

Pa., New Castle — Consolidated Motors Co., c/o Bd. Trade, plans assembling plant. To exceed $50,000. W. O. Dayton, vice-pres.

Pa., Oil City—Citizens Light & Power Co. plans sub-station, North Seneca St. Cost will exceed $40,000. Noted Aug. 10.

Pa., Pittsburgh—Lathwood Fdry. Co., 30th and Wayne Sts., having plans prepared by C. H. Dunnells, engr., 135 Riverview Ave., 3 story and basement, 103 x 194 ft. brick and concrete pattern storage shop.

Pa., Pittsburgh — Press Publishing Co., 220 Oliver Ave., having plans prepared by Hunting Davis Co., Century Bldg., 6 story and basement, publishing plant, Bigelow Blvd. and 7th Ave. $700,000.

Pa., Wilkes-Barre — Woodlawn Farm Dairy Co., North Washington and East North Sts., plans 2 story, 60 x 80 ft. dairy, brick, $50,000. G. N. Edson, Connell Bldg., Scranton, archt.

Ga., Griffin—Kincaid Mfg. Co. plans addition to textile mill, to A. Blair, 11 South Lawrence St., Montgomery, Ala., $150,000.

W. Va., Cabin Creek Junction (Coalburg P. O.)—See "Miscellaneous."

La., Shreveport — Kansas City Southern R.R. plans rebuilding 2 story, 85 x 500 ft. car shops, recently destroyed by fire. $100,000. Private plans.

Tenn., Jacksonville—Dupont De Nemours Co., Du Pont Bldg., Wilmington, Del., plans to erect and equip fibre silk plant, here. $4,000,000. Engineer and architect not selected, probably company forces.

Tenn., Memphis—Indiana Board & Filler Co. plans pulp mill addition to plant on Thomas St. $500,000.

Ky., Cynthiana—C. Le Bus having plans prepared by Manley & Young, 814 West Hill Ave., Knoxville, Tenn., 1 story, 90 x 200 ft. garage. $40,000.

Ky., Louisville—R. Rosa, c/o Amer. Mosaic & Tile Co., 309 East Bway., having plans prepared by Joseph & Joseph, Francis Bldg., 2 story garage, East Bway. $75,000.

Ky., Middlesboro—Motch Motor Co. plans 2 story, 50 x 180 ft. garage, steel frame. $50,000.

O., Cleveland—Bolivar-Prospect Co., 1004 Prospect Ave., having plans prepared by Watson Co., 4614 Prospect Ave., 10 story and basement, 116 x 180 ft., shops and garage, brick, steel and concrete, Bolivar Rd. and Prospect Ave. $1,000,000.

O., Toronto — Ohio River Edison Co., Bway., New York City, having plans prepared 1st unit of power plant, 1 story and basement, 200 x 200 ft., 75,000 k.v.a. capacity, $1,000,000. Additional units later (300,000 k.v.a. capacity) to cost $8,000,000. Stevens & Wood, Inc., 120 Bway., New York City, engrs. Pennsylvania-Ohio Power & Light Co., 2521 East Boardman St., Youngstown, lessee.

Mich., Detroit—Berry Bros., Inc., 211 Lieb St., having plans prepared by Smith, Hinchman & Grylls, 800 Marquette Bldg., 4 story and basement, 50 x 80 ft., rein.-con. and brick addition to varnish factory.

Ill., Chicago — Chicago Steel and Wire Co., 103rd and Torrence Sts., having plans prepared by L. G. Hallberg & Co., 116 South Michigan St., 1 story, 193 x 300 ft. factory, to be erected in 3 units. $500,000.

Ill., Chicago — Rawson & Eisenberg, archts., 5 North La Salle St., preparing plans 1 story, 50 x 112 ft. auto sales building and garage, fireproof, Roosevelt St. near Independence St. $40,000. Owner's name withheld.

Wis., Eau Claire—Dells Pump & Paper Co., Dells Dam., having preliminary plans prepared by L. A. De Guere, engr., Wood Blk., Wisconsin Rapids, 2 story addition, and reconstructing pulp and paper mill buildings, brick, concrete and steel, plain foundations. $500,000.

Wis., Milwaukee—Curtis Auto Co., 143 8th St., had plans prepared by Federal Eng. Co., engrs., 444 Milwaukee St., 3 story and basement, 100 x 127 ft. brick and concrete garage, plain foundation, Bway. $200,000.

Wis., Prairie du Sac—J. N. Schmidt having plans prepared 1 story, 50 x 90 ft. garage and repair shop, brick, rein.-con. and steel, plain foundation, Galeman St. $40,000. Private plans.

Mo., Kansas City—Federal Building & Loan Assn., 531 Scarritt Bldg., having plans prepared 3 story and basement, 96 x 115 ft., rein.-con. and brick garage, 9th and McGee Sts. $75,000. Private plans. H. A. Rubin, 1333 Grand Ave., lessee.

Mo., Kansas City—H. J. Nicholas, c/o Nicholas Crusher Co., 33rd and Wyoming Sts., having plans prepared brick and clay products plant, 33rd and Holly Sts. $100,000. Private plans.

Ark., Little Rock—Arkansas Central Power Co. plans 2 new substations, one on Markham and Cedar Sts., other 23rd and Spring Sts. $100,000.

Tex., Dallas — Brown Cracker & Candy Co., 603 Caruth St., soon lets contract 7 story and basement, 140 x 150 ft., rein.-con., steel and brick, Jefferson, McKinley and Caruth Sts., $300,000. Cost incl. equipment $1,000,000. Noted July 28.

Tex., Dallas—Texas & Pacific R. R. Texas & Pacific Bldg., making plans roundhouses, car shops, etc., near Fair Park, $600,000. E. F. Mitchell, c/o owner, engr.

Tex., Ft. Worth—Trinity Portland Cement Co., Commonwealth Bldg., Dallas, having plans prepared by E. O. Eckels, Wash., D. C., and R. L. Humphrey, Harrison Bldg., Phila., 2,500 bbl. portland cement mill, northwest of here. $1,000,000.

Tex., Luling—United North & South Oil Co. plans large oil refinery. $100,000. Engineer and architect not announced.

Tex., Sanger—See "Waterworks."

Tex., Throckmorton—Had plans prepared complete waterworks system, $40,000 bonds voted. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs. Noted July 28.

Oregon—See "Miscellaneous."

California—L. R. Lurie, 315 Montgomery St., San Francisco, plans auto stage terminals at various points in California and Oregon. To exceed $1,000,000. Pickwick Corp., 683 Market St., San Francisco, lessee.

Calif., Fullerton—Clay Products Co., c/o California Hotel, plans factory. To exceed $50,000.

Calif., Los Angeles—Crescent Creamery Co., 237 Winston Ave., had plans prepared by Morgan, Walls & Morgan, Van Nuys Bldg., 2 story, 100 x 200 ft., milk plant, 1 story, 80 x 80 ft. boiler plant and 2 story, 93 x 200 ft. ice cream plant, all rein.con., Slauson Ave.

Calif., Los Angeles—J. D. Watson having plans prepared by Milwaukee Building Co., Wright and Callendar Bldg., 4 story, 90 x 275 ft., rein.-con. garage, Figueroa St. near 15th St. $315,000.

Calif., San Francisco—G. A. Clough, Hib. Bank Bldg., plans 2 story and basement, concrete factory, Dore St. near Folsom St. To exceed $40,000. Engineer and architect not selected. Pacific Coast Tag Mfg. Co. Phelan Bldg., lessee.

Calif., San Francisco—L. R. Lurie, 315 Montgomery St., plans factory and warehouse, probably concrete, Folsom and 12th Sts. To exceed $40,000.

Calif., San Francisco—Pacific Gas & Electric Co., 445 Sutter St., having plans prepared 70 x 100 ft., steam plant, steel and rein.-con., Stevenson St. between 5th and 6th Sts. $250,000. Private plans.

Ont., Bolton—Walshaw & Sons Woolen Mills plan to rebuild plant, recently destroyed by fire. Loss $80,000.

Ont., Ford City—Ford Motor Co. of Canada, Ltd., plans 2 story, 103 x 107 ft. by-products plant, rein.-con., brick and steel, along tracks Grand Trunk Ry. A. Kahn, Ltd., Ford City, archts.

Ont., Weston — Brooks Steam Motors, Ltd., 1304 Canadian Pacific Railway Bldg., Toronto, plans factory, brick, concrete and steel, here. $500,000. Engineer and architect not selected.

BIDS DESIRED

Mass., New Bedford — Leary & Walker, archts. and engrs., Times Bldg., taking bids 1 story, 60 x 365 ft. plant, for Whitman Mills. $50,000.

Conn., Manchester—L. Geer, archt., 62 Prospect St., taking bids 3 story, 140x160 ft. storehouse, brick and steel, for Orford

Industrial Works (Continued)
Soap Co., Hilliard St. $160,000. Noted July 19.

N. Y., Eastview—Aug. 6, at office of F. L. Merritt, clk. Bd. Supervs. Westchester Co., Court House (White Plains), central heating plant for county buildings, here.

O., Cincinnati—July 30, by Tietig & Lee, archts., 901 4th Natl. Bank Bldg., 5 story, 42 x 100 ft., rein.-con. and brick plant, Cormany and Township Sts., for J. and F. Schroth Packing Co. To exceed $150,000.

O., Fairport—Koppers Co., engrs., Union Arcade, Pittsburgh, will build and award separate contracts for coke oven plant, here, for Diamond Alkali Co. $1,500,000.

Wis., Milwaukee — Federal Eng. Co, engrs., 444 Milwaukee St., taking bids 3 story and basement, 100 x 127 ft., brick and concrete garage, plain foundation, Rway., for Curtis Auto Co., 143 8th St. $200,000.

Wis., Milwaukee—Pittsburgh Plate Glass Co., 213 Lake St., and Cahill & Douglas, engrs., 217 West Water St., taking bids 2 story, 60 x 80 ft. power house, brick and concrete, plain and wood pile foundation, Lake St. Noted July 19.

Calif., San Francisco — J. D. Phelan, Phelan Bldg., will build 1 story, rein.-con. garage, Valencia and 17th Sts. $200,000. Work will be done by separate contracts under supervision of J. E. Scully, Phelan Bldg. Noted July 12.

Ont., Collingwood—July 28, by Postel Lock Nut Co., Ltd., factory. $50,000.

BIDS RECEIVED

N. Y., New York—G. W. Whaler, comr. Plant & Structures, Municipal Bldg., housing station, Cromwell Ave. south of West 170th St., for Street Cleaning Dept., from M. Miller Co., 709 6th Ave., $84,800. Noted July 12.

Wis., La Crosse—La Crosse Lutheran Hospital, 1910 South Front St., 3 story, 42 x 100 ft., nurses home, and remodeling boiler house and power plant, brick, rein.-con. and steel, plain foundation, from T. Molzahn, Majestic Bldg., $63,621. Noted Apr. 19.

CONTRACTS AWARDED

Mass., North Grafton—Linen Thread Co. of Massachusetts, 418 Grand St., Paterson, N. J., 3 story, 75 x 96 ft. mill, brick and steel, plain foundation, here, to E. D. Ward Co., 82 Foster St., Worcester. Archts. est. $50,000.

R. I., Providence—S. Priest, c/o Imperial Printing & Furnishing Co., Bellefonte (Providence P. O.), 1 story, 190 x 300 ft., brick and concrete garage and service station, Elmwood Ave., to C. I. Bigney Constr. Co., 184 Washington St. Est. cost $150,000. Noted May 24.

R. I., Providence—E. Radding, 144 Westminster St., 2 story garage, brick, concrete and steel, plain foundation, North Main, Frost and Nashua Sts., to E. Radding Constr. Co., 144 Westminster St. Archts. est. $75,000. Noted May 24.

R. I., Woonsocket—Fairmount Worsted Co., Mendon Rd., 2 story, 65 x 100 ft. mill, brick and timber, plain foundation, Mendon Rd., to Mahoney & Tucker, 72 Weybosset St., Providence. Archts. est. $40,000.

Pa., Allenport—Pittsburgh Steel Products Co., Union Arcade, Pittsburgh, 1 story, 120 x 625 ft. shipping and storage building, corrugated iron walls, to Austin Co., Union Arcade, Pittsburgh.

Pa., Pittsburgh—United States Glass Co., 9th and Bingham Sts., will build 2 story and basement, 100 x 120 ft., brick and steel addition, 9th and Sarah Sts., by day labor. Private plans.

O., Cleveland—Fairview Park Hospital Assn., 3305 Franklin Ave., 2 story, 45 x 47 ft. boiler house and laundry, brick and concrete, to C. N. Griffen Constr. Co., 5511 Euclid Ave. Noted May 3 under "Buildings."

O., Cleveland—Fisher Body Ohio Co., General Motors Bldg., Detroit, Mich., 1 story, 120 x 240 ft., brick and steel storage plant, East 140th St. and Coit Rd., here, to Austin Co., 16112 Euclid Ave. Archts. est. $150,000. Noted July 12.

Wis., Cambridge—A. Kravick will build 1 story, 50 x 95 ft., brick and rein.-con. garage, by day labor; plain foundation, to O. Jarlsberg, Cambridge. Archts. est. $40,000. Private plans.

Wis., Cuba City—Connecting Link Milling Co., 1301 Central Ave., Dubuque, Ia., rebuilding power mining and milling plant, 60 x 100 ft., brick and rein.-con., plain foundation, here, to J. J. Hemphill, Cuba City. Archts. est. $40,000. Noted July 13.

Wis., Eau Claire — Lange Canning Co., Mill St., will build 1 story, 47 x 154 ft., brick and timber addition, Madison St., by day labor. $40,000. Private plans.

Wis., Fond du Lac—J. Grebe, 22 Rees St., 1 story, 56 x 106 ft., garage and auto repair shop, brick and rein.-con., plain foundation, to S. Loughlin, 464 Ruggles St. Noted July 28.

Wis., Milwaukee—Froedtert Malting Co., 478 7th St., 2 story, 40x150 ft., concrete factory, plain foundation, Cherry St., to E. Dreyer. 1008 6th St. Archts, est. $45,000.

Wis., New London—Modern Mfg. Co., 2 story, 36 x 72 ft., brick and timber factory, plain foundation, to F. Schoenrock & Sons, New London. Engrs. est. $40,000.

Wis., Rice Lake—C. O. Ronning Co., 2 story, 50 x 160 ft., brick and concrete garage, plain foundation, to Wilcutts Co., 802 Clough Ave., Superior. $60,000.

Calif., San Francisco — L. Barrett, 415 Taylor St., 2 story, concrete garage, O'Farrell St. near Taylor St., to Barrett & Hilp, Sharon Bldg., $75,000.

Calif., San Francisco—E. Soule Co., Rialto Bldg., will build 1 story warehouse, rein.-con., Mississippi and Army Sts.; by day labor. To exceed $40,000. Private plans.

Buildings

PROPOSED WORK

Mass., Gardner—High School—School Dept. plans 2 story and basement, brick and fireproof. Prospect St. $175,000. Engineer and architect not selected.

Mass., Greenfield — Masonic — Greenfield Masonic Assn. having plans prepared by J. W. Beals Sons Co., 62 Summer St., Boston, 3 story, 70 x 120 ft., brick and stone. $175,000. W. E. Dickson, chn. bldg. comn.

Mass., Springfield—Home—Melha Temple—Masonic Assn., Suffield, Conn., having plans prepared by M. H. Westhoff, 293 Bridge St., Springfield, 2 story children's home, brick and steel, Parkside Ave., here. $500,000. G. M. Herdee, chn. building com. Hentz & Adler, 92½ North Forsythe St., Atlanta, Ga., associated archts.

R. I., Pawtucket—Church—St. Cecelia Roman Catholic Church, Central Ave., having plans prepared by W. F. Fontaine, 285 Main St., Woonsocket, 1 story and basement, brick and stone, Central and Newport Aves. $200,000.

R. I., Providence—Armory—State Armory Comn., State House, having plans prepared by W. G. Richards, 17 Exchange St., 3 story addition, North Main St. $380,000.

R. I., Providence—Gymnasium—Brown University, Prospect St., plans 2 story and basement, fireproof, Campus. $750,000. Engineer and architect not announced.

R. I., Providence — Masonic — Masonic Temple Building Assn., 127 Dorrance St., plans brick and stone, Francis, Park and Brownell Sts. $1,500,000. W. G. Upham, 226 Devonshire St., Boston, archt.

Conn., Berlin — School — Town having plans prepared by C. C. Palmer, 87 West Main St., New Britain, 2 story, 16 room, brick and steel, plain foundation. $150,000.

Conn., Bristol—Hospital—Bristol Hospital, Inc., having plans prepared by C. S. Palmer, 114 Whitney Ave., New Haven, 3 story and basement, brick and steel. $450,000. Noted Feb. 23.

Conn., Hartford — Apartment — W. H. Foberg, 509 Hillside Ave., having plans prepared by J. E. Marchetti, 721 Main St., 3 story, 100 x 180 ft., brick and stone, Washington St. $200,000.

Conn., Manchester — Church — Methodist Episcopal Church having plans prepared by A. E. Hill, 75 West Minster St., Providence, R. I., for brick and steel church, $200,000. J. Cooper, 1226 Main St., South Manchester, pastor.

Conn., Meriden — Telephone — Southern New England Telephone Co., 90 West Main St., plans 3 story, 60 x 180 ft. brick, plain foundation, Butler St. $200,000. Private plans.

Conn., Middletown—Nurses' Home—F. M. Salmon, comptroller, State Capitol, Hartford, receiving sketches until Aug. 31, for 3 story, brick, plain foundation, at Connecticut State Hospital, here. $190,000. Noted May 3.

Conn., Mystic—Dormitory—F. M. Salmon, comptroller, State Capitol, Hartford, receiving sketches 3 story dormitory, here, for Mystic Aural School. $225,000. Noted May 10.

Conn., Norwich—Hospital, etc.—Norwich State Hospital having plans prepared by Cudworth & Thompson, Thayer Blk., 2 story ward building, and 2 story nurses home, brick and semi-fireproof. $357,500. Noted June 7.

Conn., Norwich—Nurses Home—Backus Memorial Hospital plans 3 story and basement, brick and fireproof, at hospital. $250,000. Engineer and architect not selected.

Conn., Vernon — High School — George Sykes Memorial School Com., Rockville, having plans prepared by W. B. Chambers, 111 East 40th St., New York City, 2 story, 100 x 130 ft., brick and steel. $300,000.

N. Y., Binghamton—Lodge—Fraternal Order Eagles, 160 Washington St., plans modern fireproof. To exceed $200,000. Engineer and architect not selected.

N. Y., Buffalo—Clubhouse and Cathedral—Buffalo Consistory, 1180 Delaware Ave., had plans prepared by H. F. Cook, 408 Pearl St., 1 and 2 story, 125 x 293 ft., rein.-con., brick and stone, Delaware Ave. $750,000.

N. Y., Niagara Falls — Hospital — Bd. Trustees Memorial Hospital, 640 11th Ave., having plans prepared by Kirkpatrick & Gannon, Niagara Falls, large extensions and additions, 11th and Pine Sts. To exceed $200,000. Noted Sept. 28.

N. Y., Troy—Temple—Troy Masonic Hall Assn. plans 7 story, 190 x 225 ft., rein.-con., brick and steel, plain foundation, 8th St. $650,000. Engineer and architect not selected.

N. J., Boonton—Laboratory—State Building Com., Trenton, plans hydraulic laboratory, along Morris Canal, here. H. F. Critchlow, State House, Trenton, hydraulic engr.

N. J., Mays Landing—High School—Hamilton Twp. Bd. Educ. having plans prepared by J. H. Vaughn, Guarantee Trust Bldg., Atlantic City, 2 story, 107 x 192 ft. $285,000.

Pa., Brownsville—Store and Hotel—S. Tiff, Monongahela House, having plans prepared by E. R. Johnson, Fayette Title & Trust Co., Uniontown, 3 story and basement, 58 x 300 ft., brick, tile and terra cotta. $200,000.

Pa., Midland—High School—Bd. Educ. plans 2 story and basement. $175,000. W. G. Eckles, Lawrence Savings & Trust Bldg., New Castle, archt.

Pa., Pittsburgh—High School—Bd. Educ., Fulton Bldg., having plans prepared by Alden & Harlow, Farmers Bank Bldg., 3 story and basement, brick and stone, Ruth St. $1,000,000.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., 2 story and basement, brick, stone, tile and rein.-con., Bonvue Ave., general contract to Pittsburgh Eng. & Constr. Corp., 511 Homewood Ave., $186,716. Noted June 28.

Pa., St. Marys—High School—St. Marys Church having plans prepared by J. P. Brenot, archt., Opera House Bldg., Oil City, 2 story and basement, 80 x 140 ft., brick and tile. $150,000.

Fla., Indian River City—Hotel—Indian River City Town Site Corp. having plans prepared by Marsh & Saxelbye, 415 West Bldg., Jacksonville, hotel, 200 rooms. $600,000.

Fla., St. Augustine—School—St. Johns Co. School Bd. plans election Aug. 2, to vote on $300,000 bonds for various school buildings. D. D. Corbett, supt. pub. institutions.

Fla., Tampa—Lodge and Office—Hillsborough Lodge having plans prepared by M. L. Elliott, Citizens Bank Bldg., 10 story, 103 x 120 ft., West Lafayette and Parker Sts. $700,000.

Ala., Birmingham—Office—Southern Ry. Co., 4th and Sycamore Sts., Cincinnati, O., having plans prepared by S. S. and G. H. Godley, 307 East 4th St., Cincinnati, O., 10 story, 50 x 90 ft., rein.-con., brick and stone, 1st Ave. and 22nd St., here. $200,000.

La., Baton Rouge—Penitentiary—State Bd. of Liquidation authorized J. M. Parker, governor, to borrow $454,700 for rehabilitation of penitentiary, here.

La., New Orleans — Hospital — Orleans Anti-Tuberculosis League plans hospital on 18 acre site, to have 500 ft. frontage, and 7 acre park, Gentilly Rd. and St. Bernard Ave., 7th Ward. L. Lyons, of I. L. Lyons & Co., Ltd., 226 Camp St., pres. Engineer and architect not selected.

La., New Orleans — Schools — Orleans Parish authorized issuance of $3,000,000 bonds for school building program. Soon takes bids for Capdau High School.

Streets and Roads (Continued)

La., Shreveport — Schools — Aug. 14, to vote on $1,000,000 bonds for maintenance of schools, erection of modern high school and down town ward school to replace one now in use. E. Goldstein, pres. school staff.

La., Shreveport—Store—J. Katzenstein and associates, Merchants Bldg., plans 4 story and basement, brick and concrete, Texas and Louisiana Aves. $300,000. Engineer and architect not announced.

Tenn., Memphis—Library—Cossitt Library having plans prepared by E. E. Harrison, U & P Bldg., 3 story addition, brick or stone and steel, South Front St. and Monroe Ave. $150,000.

Tenn., Memphis—Store—Peabody Co. having plans prepared by E. Weil, New Orleans, La., and Hanker & Cairns, Scimitar Bldg., Memphis, 8 story, South Main, Monroe and South Front Sts. $600,000. B. Lowenstein Bros., Inc., Main and Court Sts., lessee.

Ky., Louisville — Office — Standard Sanitary Mfg. Co., 6th and A Sts., plans 3 story, brick, 6th and Shipp Sts. $150,000. Engineer and architect not selected.

O., Canton—School—Bd. Educ. had plans prepared by G. F. Hammond, Center Ridge Rd., Cleveland, school, Lincoln Ave. $650,000. Foundation contract awarded.

O., Cleveland — Apartment — Giddings Square Building Co., Erie Bldg., plans 4 story, brick, on 212 x 280 ft. lot, East 70th St. south of Euclid Ave. $200,000. Engineer and architect not selected.

O., Cleveland—Apartment—L. Duchou, 3045 Essex Rd., Cleveland Heights, having sketches made by A. F. Janowitz, 811 Prospect Ave., 6 story and basement, brick and steel, on 160 x 200 ft. lot, West 112th St. and Lake Ave., here. $350,000.

O., Cleveland — Apartment — M. Helper, Realty Co., Garfield Bldg., plans 4 story and basement, 70 x 100 ft., brick and steel, 1858 East 20th St. $150,000. Engineer and architect not selected.

O., Cleveland—Commercial—G. B. Harris and J. Klein, Engineers Bldg., having plans prepared by F. W. Ball, Hanna Bldg., 3 story and basement, 225 x 158 ft., brick and steel, 10221 Euclid Ave. $150,000.

O., Cleveland—Commercial and Apartment—D. B. and H. Steuer, 11224 Euclid Ave., plan 3 story and basement, brick, East 105th St. and Wilbur Ave. $150,000. Engineer and architect not selected.

O., Cleveland—Commercial and office—Ninth-Chester Co., c/o S. H. Kleinman, Treas. Natl. City Bldg., plans 12 story and basement, 64 x 115 ft., brick, steel and concrete, East 9th St. and Chester Ave. $1,000,000. Engineer and architect not selected.

O., Cleveland—Office—Amer. Express Co., c/o A. S. Hibbard, ch. clk., Neman-Stern Bldg., plans brick and steel addition on 132 x 132 ft. lot, 1540 Lakeside Ave. $200,000. Private plans.

O., Cleveland—Store and Apartment—R. H. Stotter, 822 Leader-News Bldg., having plans prepared by Morris & Weinberg, 3226 Euclid Ave., 3 story and basement, brick and timber, on lot 129 x 150 ft., Euclid Ave. and Charles Rd. $200,000.

O., Cortland—School—Bd. Educ. plans new brick school. $150,000. Engineer and architect not announced.

O., Sandusky—Hotel and Store—C. B. Wilcox, 621 Wayne St., interested in corporation which is being formed to build 6 story, on site of old West House. $250,000. J. M. Graham & Co., Cleveland, archts.

Ill., Chicago—Apartment—R. Gregori, archt., 155 North Clark St., preparing plans 3 story and basement 130 x 200 ft., fireproof, Buena St. near Clarendon St. $200,000. Owner's name withheld.

Ill., Chicago—Church—St. Columbana's Catholic Parish, c/o J. Burns, archt., 64 West Randolph St., plans fireproof church, 71st and Calumet Sts. $350,000.

Ill., Chicago—High School—Bd. Educ., 640 South Clark St., plans 4 story high school, fireproof, Wilson, Leland, Kimball and St. Louis Sts. $4,000,000. J. C. Christensen, 640 South Clark St., archt.

Ill., Chicago—Store, Office and Hotel—F. Dubish, 3504 Baltimore Ave., plans 3 story, 100 x 100 ft., fireproof, Baltimore Ave. and 135th St. $150,000. A. Proskauer, 159 North State St., archt.

Ill., Chicago—Theatre, Store and Office—Natl. Theatre Corp., 7542 Cottage Grove Ave., having plans prepared by A. C. Leska and J. E. Eberson, 212 East Superior St., 3 story, 84 x 106 x 144 x 183 ft., 7941-47 South Halsted St. $1,500,000.

TUNNEL—NEW YORK

Following are lowest three bids opened June 26, by New York State Bridge & Tunnel Comn. and New Jersey Interstate Bridge & Tunnel Comn., Hall of Records, for portion of two tunnels as approaches to river section of Hudson River Tunnel, Contr. No. 5, (A) Rogers & Hagerty, Inc., Grand Central Terminal, (awarded contract); (B) P. McGovern, Inc., 50 East 42nd St.; (C) Frederick L. Cranford, Inc., 373 Bridge St., Brooklyn. The unit bids were as follows:

	A	B	C
5,500 cu.yd. excavation for pipes and excavation not otherwise provided for	$14.00	$16.00	$22.00
25,800 cu.yd. excavation above M.H.W. for tunnel	14.00	18.00	22.00
68,000 cu.yd. excavation below M.H.W. for tunnel	14.00	19.00	22.00
1 underpinning Nos. 293-301 Spring Street (lump sum)	1,000.00	53,000.00	35,000.00
1 Underpinning No. 290 Hudson St. and Nos. 286-288 Spring St. (lump sum)	39,000.00	26,000.00	16,000.00
1,010 lin.ft. maintaining Canal St. sewer	1.00	45.00	155.00
Underpinning 5 railroad columns not within net lines of tunnel excavation	2,000.00	6,400.00	2,000.00
Underpinning 3 railroad columns within net lines of tunnel excavation	2,000.00	6,400.00	2,200.00
26,800 cu.yd. concrete	22.60	22.00	24.64
52,600 sq.ft. pre-cast concrete forms	.60	.30	.50
1,000 bbl. mortar batches in connection with placing concrete	5.00	4.50	5.00
85 cu.yd. brick masonry	65.00	40.00	50.00
4,200 lin.ft. granite curbing in tunnel	3.50	4.70	5.50
10 cu.yd. hollow terra cotta tile, 2 in.	65.00	37.00	45.00
10 cu.yd. hollow terra cotta tile, 3 in.	65.00	36.00	45.00
10 cu.yd. hollow terra cotta tile, 4 in.	65.00	32.00	45.00
100 lin.ft. timber piles	1.50	1.00	3.00
1,250 sq.yd. waterproofing, treated fabric laid with asphalt, 2 ply	2.00	1.55	2.00
4,400 sq.yd. waterproofing, treated fabric laid with asphalt, 3 ply	2.25	2.25	2.50
6,960 sq.yd. waterproofing, treated fabric laid with asphalt, 4 ply	3.00	2.95	2.70
10 sq.yd. waterproofing, treated fabric laid with asphalt, 5 ply	4.00	3.65	3.00
200 sq.yd. waterproofing, treated fabric laid with asphalt, 6 ply	4.00	4.35	3.50
3,500 cu.yd. waterproofing, brick in asphalt mastic including 1 ply waterproofing	45.00	50.00	48.00
4,000 ton built-up steel work and tie-rods	150.00	117.00	137.50
15 ton bolts, castings and wrought-iron fixtures not otherwise provided for	350.00	300.00	400.00
470 ton steel beams and shapes	150.00	117.00	132.50
40 ton steel rods and bars	110.00	90.00	105.00
30 ton wire mesh	200.00	400.00	500.00
137,000 sq.ft. steel sheet piling	1.50	1.70	2.10
38 ton copper steel-plates, bolts, nuts and washers	350.00	170.00	300.00
1,000 lb. wrought-iron or steel pipe for sub. chgs., not pipe for electrical conduit	.20	.10	12.00
100 lb. new malleable iron fittings for above	.75	.20	18.00
450 lin.ft. wrought-iron or steel pipe in the tunnel, 2 in.	.45	1.00	1.50
50 lin.ft. wrought-iron or steel pipe in the tunnel, 3 in.	.87	1.50	2.00
5,000 lin.ft. galvanized iron electric conduits in the tunnel, ¾ in.	.45	.30	.35
7,100 lin.ft. galvanized iron electric conduits in the tunnel, 1 in.	.60	.40	.60
100 lin.ft. galvanized iron electric conduits in the tunnel, 1¼ in.	.80	.50	.75
5,900 lin.ft. galvanized iron electric conduits in the tunnel, 1½ in.	.80	.60	.80
100 lin.ft. galvanized iron electric conduits in the tunnel, 2 in.	1.00	1.00	1.00
100 lin.ft. galvanized iron electric conduits in the tunnel, 3 in.	1.50	2.00	1.50
30 galvanized iron fixtures—outlet boxes	2.00	1.00	2.50
300 galvanized iron fixtures—pull boxes 4 x 4 x 3 in.	4.00	1.00	3.50
30 galvanized iron fixtures—pull boxes 6 x 6 x 4 in.	3.00	2.50	4.50
10,000 lb. galvanized iron fixtures—curb guards, ladders and miscellaneous fixtures	.30	.20	.11
40 galvanized iron fixtures—pull boxes 12 x 12 x 6 in.	10.00	9.00	5.00
250 galvanized iron fixtures—boxes for lights	13.00	20.00	5.00
80 ton cast-iron hub and spigot pipe (straight pipe)	150.00	110.00	80.00
10 ton cast-iron hub and spigot pipe (special castings)	200.00	215.00	160.00
75 ton cast-iron pipe, straight pipe, for high-pressure fire system	150.00	150.00	80.00
30 ton cast-iron pipe, special castings for high-pressure fire system	300.00	270.00	160.00
15 ton cast iron fixtures, miscellaneous new manhole, etc.	160.00	180.00	250.00
500 lin.ft. cast iron water or other tunnel pipe, 4 in.	1.75	2.00	1.50
2,600 lin.ft. cast iron water or other tunnel pipe, 6 in.	2.50	3.00	2.00
400 lin.ft. cast iron water or other tunnel pipe, 8 in.	3.25	3.60	3.00
10 lin.ft. cast iron water or other tunnel pipe, 10 in.	4.00	5.40	3.00
30 lin.ft. cast iron water or other tunnel pipe, 12 in.	5.00	6.50	3.00
11,000 lb. bronze fixtures—bolts, wedges and hinges	1.25	1.00	.70
19,500 duct. ft. tunnel ducts, single-way	.30	.30	.19
870 sq.ft. asbestos materials—¼ in. asbestos lumber	1.00	1.00	.50
100 lin.ft. changing special cast-iron pipe—4 in. pipe for U.S.T.D. cables	4.00	7.00	3.00
200 lin.ft. changing special cast-iron pipe—8 in. pipe for U.S.T.D. pneumatic tube	13.00	11.00	6.00
10 lin.ft. changing cast-iron water pipe—4 in.	2.00	1.00	2.00
650 lin.ft. changing cast-iron water pipe—6 in.	2.50	1.40	2.50
100 lin.ft. changing cast-iron water pipe—8 in.	3.25	1.80	3.00
1,250 lin.ft. changing cast-iron water pipe—12 in.	3.00	2.40	4.00
10 lin.ft. changing cast-iron water pipe—16 in.	4.00	3.00	5.00
70 lin.ft. changing cast-iron pipe for high pressure fire system—8 in.	10.00	2.00	4.00
40 lin.ft. changing cast-iron pipe for high pressure fire system—12 in.	10.00	3.00	5.00
100 lin.ft. changing cast-iron pipe for high pressure fire system—16 in.	10.00	4.00	5.00
300 lin.ft. changing cast-iron pipe for high pressure fire system—24 in.	8.00	6.00	10.00
150 lin.ft. changing gas pipe (not new pipe) 4 in.	2.00	1.00	2.50
550 lin.ft. changing gas pipe (not new pipe) 6 in.	1.50	1.25	3.00
10 lin.ft. changing gas pipe (not new pipe) 8 in.	3.00	1.75	5.00
130 lin.ft. changing gas pipe (not new pipe) 10 in.	3.00	2.00	6.00
140 lin.ft. changing gas pipe (not new pipe) 12 in.	3.00	2.30	6.00
90 lin.ft. changing gas pipe (not new pipe) 16 in.	5.00	2.75	8.00
30 lin.ft. changing gas pipe (not new pipe) 20 in.	10.00	3.20	10.00
800 duct. ft. changing file conduits, and conduits other than wrought-iron, etc.	.60	.50	.40
100 lin.ft. changing wrought-iron, steel or fiber conduits, 2 in.	1.00	1.50	1.50
600 lin.ft. changing wrought-iron, steel or fiber conduits, 2½ in.	1.00	2.00	1.50
14,000 lin.ft. changing wrought-iron, steel or fiber conduits, 3 in.	1.00	.90	2.00
625 lin.ft. changing wrought-iron, steel or fiber conduits, 3½ in.	1.50	1.20	2.00
100 lin.ft. changing wrought-iron, steel or fiber conduits, 4 in.	1.50	1.50	3.00
100 lin.ft. changing wrought-iron, steel or fiber conduits, 4½ in.	1.50	1.80	3.00
165 lin.ft. laying vitrified pipe sewers—12 in. pipe	4.00	5.40	4.00
900 lin.ft. laying vitrified pipe sewers—15 in. pipe	5.00	6.50	5.00
10 lin.ft. laying vitrified pipe sewers—20 in. pipe	10.00	8.50	6.00
10 lin.ft. laying cast-iron pipe sewer—12 in. pipe	2.50	2.25	4.00
10 lin.ft. temporary by-pass gas pipe upon or below street surface, 4 in.	4.00	6.00	5.00
1,350 lin.ft. temporary by-pass. gas pipe upon or below street surface, 6 in.	7.00	7.00	5.00
10 lin.ft. temporary by-pass. gas pipe upon or below street surface, 8 in.	10.00	8.00	5.50
775 lin.ft. temporary by-pass. gas pipe upon or below street surface, 10 in.	9.00	9.00	6.00

	A	B	C
1,980 lin.ft. temporary by-pass. gas pipe upon or below street surface, 12 in.	11.00	10.00	7.00
10 lin.ft. temporary by-pass. gas pipe upon or below street surface, 16 in.	15.00	12.00	8.00
10 lin.ft. temporary by-pass. gas pipe upon or below street surface, 20 in.	15.00	15.00	10.00
10 lin.ft. temporary by-pass. gas pipe above street surface, 4 in.	11.00	7.00	12.50
10 lin.ft. temporary by-pass. gas pipe above street surface, 6 in.	12.00	8.00	14.00
10 lin.ft. temporary by-pass. gas pipe above street surface, 8 in.	15.00	9.00	15.00
100 lin.ft. temporary by-pass. gas pipe above street surface, 10 in.	16.00	10.00	16.00
100 lin.ft. temporary by-pass. gas pipe above street surface, 12 in.	18.00	11.00	17.00
380 lin.ft. temporary by-pass. gas pipe above street surface, 16 in.	20.00	13.00	18.00
10 lin.ft. temporary by-pass. gas pipe above street surface, 20 in.	20.00	16.00	20.00
420 lin.ft. restoring New York Central R.R. tracks	15.00	15.40	10.00
12,600 sq.yd. restoration of granite block pavement	5.00	6.00	5.50
5,200 sq.yd. restoration of sidewalks and other surfaces between curb and building line	4.00	3.00	4.50
3,400 lin.ft. restoration of curbing	1.00	1.00	1.50
100 sq.yd. new granite block pavement other than required for restoration	8.00	8.00	7.00
100 sq.yd. new cement sidewalk other than that required for restoration	3.50	3.50	5.00
100 lin.ft. new granite curb other than that required for restoration	3.50	3.80	6.50
Extended totals	$3,467,414	$3,894,097	$4,593,714

Buildings (Continued)

Wis., Berlin—Grade School—School Bd. plans 2 story and basement, brick, tile and concrete, plain foundation, on West Side. $150,000. P. Talbot, pres. Engineer and architect not selected.

Wis., Burlington—High School—School Bd. had plans prepared by Oppenhamer & Obel, Nicollet Bldg., Green Bay, 2 story and basement, brick, tile and concrete, plain foundation. $200,000.

Wis., Madison—Apartment—M. Woldenberg, 54 West Kenzie St., Chicago, having plans prepared by Claude & Starck, Badger Annex, 5 story, rein.-con., brick and steel, plain foundation, State St. here. $300,000. Noted July 12.

Wis., Madison — City Hall, etc. — Joint Building Com. City of Madison and Dane Co., W. L. Woodword, chn., 17 West Main St., plan city hall and court house, rein.-con., brick and steel, plain foundation, Doty St. $200,000. Engineer and architect not selected.

Wis., Milwaukee — Apartment — All-One Apartment Co., 124 2nd St., having plans prepared by Rosman & Wierdsma, 424 Jefferson St., 4 story and basement, 46 x 134 ft., brick, tile and concrete, plain foundation, 12th St. $165,000.

Wis., Milwaukee—Apartment—Rosman & Wierdsma, archts., 424 Jefferson St., preparing preliminary plans 3 story and basement, brick and concrete, plain foundation, on West Side. $150,000. Owner's name withheld.

Wis., New London—High School—School Bd. having preliminary plans prepared by Auler & Jensen, F. R. A. Bldg., Oshkosh, 2 story and basement, brick, tile and concrete. $250,000.

Minn., Duluth—Office and Store—German & Jenssen, archt. and engrs., 407 Exchange Bldg., rejected bids June 12, 5 story and basement, 109 x 140 ft., rein.-con. and brick, Superior St. and Lake Ave., here, for R. M. Bodley Co., Boston. Project deferred. Noted June 7.

Minn., South St. Paul—Church-School—St. Augustine's Catholic Church, c/o H. G. McCall, having plans prepared by Hausler & Kerr, 548 Hamm Bldg., St. Paul, brick and stone. $150,000.

Kan., Ft. Scott—Church—Presbyterian Congregation having revised plans prepared by E. O. Brostrom, 621 Reliance Bldg., Kansas City, Mo., 2 story and basement, native stone. $150,000.

Kan., Kansas City—Memorial and Auditorium—City soon takes bids 3 story and basement, 146 x 185 ft., rein.-con., brick and terra cotta, 7th and Barnett Sts. $400,000. Rose & Peterson, 434 Brotherhood Bldg., Kansas City, Mo., archts.

Mo., St. Louis—Central Y.M.C.A., c/o B. Moser, 901 Carr St., plans 10 or more story building, rein.-con. and brick, concrete pile foundation, in downtown district. $1,000,000. Private plans.

Mo., Unionville—Court House—Putnam Co. having preliminary plans prepared by J. G. Braecklein, Federal Reserve Bank Bldg., Kansas City, 3 story and basement, 70 x 90 ft. $150,000. Noted June 14.

Tex., Cisco—**Church**—Presbyterian Church had plans prepared by R. H. Hunt & Co., engrs. and archts., Southwestern Life Bldg., Dallas, 2 story and basement, brick, plain foundation. $150,000.

Tex., Dallas —Church etc.—Church of Incarnation, c/o C. E. Snowden, pastor, Harwood and McKinney Ave., plans church and parish house, brick, stone and concrete, Carroll and McKinney Aves. $200,000. Engineer and architect not announced.

Tex., Ft. Worth—Dormitory—Masonic Orphans Home takes bids in Fall 3 story, concrete and brick. $175,000. H. M. Greene Co., Northern Texas Bldg., Dallas, engrs. and archts.

Tex., Houston—Library—City had plans prepared and soon takes bids 3 story, rein.-con., brick and stone, McKinney and Smith Sts. $200,000, ultimate cost $700,000. W. W. Watkins, 212 Scanlan Bldg., and L. A. Glover, 604 Binz Bldg., archts.

Tex., San Antonio—Theatre—Corporation being formed (M. Booth-Jones, Exch. Bank Bldg., Spokane, Wash., primary owner), plans theatre, here. $200,000. D. Grovers, St. Louis, Mo., engr.

Tex., Texarkana—City Hall—Aug. 14, to vote on $200,000 bonds for city hall. W. J. Nichols, mayor.

Okla., McAlester—Court House—Pittsburg Co. election Aug. 14, to vote on $300,000 bonds for 3 story and basement, 80 x 150 ft., brick.

Okla., Norman—Student—Student Union, Oklahoma City, having plans prepared by Sorey & Vahlberg, Terminal Bldg., Oklahoma City, 4 story and basement, 80 x 200 ft., rein.-con., brick and stone, here. $350,000.

Okla., Okmulgee — Schools — Bd. Educ. having plans prepared by Smith & Senter, 401 Commerce Investment Bldg., rein.-con., brick and stone. $195,000.

Wash., Mt. Vernon—Courthouse—T. F. Doan, archt., Sunset Bldg., Bellingham, takes bids about Aug. 30, 5 story, steel and concrete, for Skagit Co. $300,000.

Calif., Berkeley — Store and Office — F. Koerber, 2647 Ashby Ave., having plans prepared 6 story and basement, fireproof, University Ave. near Shattuck St. $150,000. Architect's name withheld.

Calif., Fresno—Church—St. Paul's Methodist Episcopal Church, 417 West Belmont St., had plans prepared 2 story, rein.-con., M and Fresno Sts. $150,000. S. Cooper, secy., finance com. Engineer's and architect's name withheld.

Calif., Fresno—Club—Y. M. C. A., 1660 M St., plans club, N and Tuolumne Sts. $150,000 or more. Engineer and architect not selected.

Calif., Fresno — Office and Store — R. Emirzian, 1002 T St., plans 5 story, 75 x 100 ft., fireproof, Inyo St. and Van Ness Ave. $200,000. Engineer and architect not selected.

Calif., Fullerton — Schools — Fullerton School Dist. plans to vote on $150,000 bonds for new schools and additions to present structures.

Calif., Hollywood—Church—First Presbyterian Church of Hollywood, 1760 North Gower St., had plans prepared by H. M. Patterson, O. T. Johnson Bldg., Los Angeles, 2 story and basement, brick and terra cotta, Gower and San Carlos Sts. $150,000.

Calif., Long Beach—Club—Golden State Club, c/o Milwaukee Building Co., designers, Wright & Callendar Bldg., Los Angeles, having preliminary plans prepared 10 story, 180 x 350 ft., probably rein.-con., here.

Calif., Los Angeles—High School—Bd. Educ. soon takes bids 2 story, 320 x 450 ft., rein.-con. and brick, Fairfax Ave. $600,000. J. and D. Parkinson, Title Insurance Bldg., archts.

Calif., Los Angeles—High School—City having plans prepared by Morgan, Walls & Morgan, Van Nuys Bldg., 3 story, 160 x 316 ft., brick, Washington St., for Los Angeles Polytecnnic High School. $340,000.

Calif., Los Angeles—Office—F. W. Johnson, et al., having plans prepared by Walker & Eisen, Pacific Finance Bldg., 14 story and basement, 90 x 110 ft., rein.-con., 7th and Los Angeles Sts. $750,000.

Calif., Oakland—School—St. Elizabeth's Parish, 1532 34th Ave., having preliminary plans prepared by J. J. Donovan, 1916 Bway., 2 story, rein.-con., 34th Ave. $255,000.

Calif., Sacramento—Store, Office and Lodge—Sacramento Lodge 1020 Loyal Order of Moose having plans prepared 7 story and basement, rein.-con. $250,000. M. L. Burns, Ochsner Bldg., in charge of project. Engineer and architects names withheld.

Calif., San Diego—Art—City had plans prepared by W. T. Johnson, Timkin Bldg., for art building, Balboa Park. To exceed $150,000.

Calif., San Francisco—Apartment—A. Driscoll, c/o S. Schnaittacher, archt., 233 Post St., had plans prepared 5 story and basement, steel and concrete, Geary and Leavenworth Sts. $150,000.

Calif., San Francisco—Hall—Musicians Union, 68 Haight St., having plans prepared by S. Schnaittacher, 233 Post St., 2 story and basement, rein.-con., Jones St. near Eddy St. $80,000. Designed for additional stories, ultimate cost $200,000.

Calif., San Francisco—Synagogue—Temple Emanu-El, Kearny St., having plans prepared by S. Schnaittacher, 233 Post St., and Backwell & Brown, 251 Kearny St., synagogue, Lake St. $500,000. L. C. Block, 248 Battery St., chn. building com. B. R. Maybeck and G. A. Lansburgh, 140 Montgomery St., consult. archts.

Calif., Santa Barbara—Schools—Santa Barbara Grammar School Dist. rejected bids Washington and Franklin Schools, concrete and brick. Incorrectly noted in July 12 issue.

Calif., Santa Paula — City Hall — See "Sewers."

Que., Weedon—Church—Roman Catholic Congregation Parish Church of Weedon soon takes bids church, brick, steel and stone. $175,000. A. Rousseau, pastor.

Ont., Ford—School—Public School Bd. having plans prepared by Nichols & Sheppard, 15 Sandwich St., 2 story and basement, 15 room, rein.-con. and brick. $210,000.

BIDS DESIRED

Mass., Cambridge (Boston P. O.)—School—July 30, by city, 3 story, 68 x 100 ft., brick and steel Putnam Ave. $150,000. E. B. McGirr, archt., and R. D. Kimball Co., engrs., both at 6 Beacon St., Boston. Noted Nov. 2.

Mass., Lynn—Store and Office—Aronson Rubin Realty Co., 294 Washington St., Boston, will build 3 story, 60 x 125 ft., brick and steel, Central Ave., by separate contracts. $200,000. C. L. Betton, 31 Exchange St., archt.

Mass., Springfield—Temple—July 30, by McClintock & Craig, archts., 33 Lyman St., 4 story, 98 x 200 ft., brick and steel, State St., for Springfield Masonic Assn., State and Main Sts. $500,000. E. H. Blodgett, pres. Noted Mar. 15.

Mass., Ware — Church — Mt. Carmel Church, c/o J. T. Sheehan, pastor, taking bids 80 x 140 ft., brick and steel, $165,000. J. Jackson, 185 Church St., New Haven, Conn., archt. Noted Nov. 2.

Mass., Williamstown—High School—Aug. 20, by Peare-Quiner-Nevin & Chickering, 6 Beacon St., Boston, 2 story, 58 x 130 ft. with 62 x 68 ft. ell, brick and steel, for town school com. $150,000. Noted June 7.

N. Y., Brooklyn—High School—Aug. 14, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Girls Commercial High School, Classon Ave. between Union and President Sts., for Bd. Educ. Noted June 14.

N. Y., Scotia—High School—Aug. 6, by Bd. Educ., 3 story, 75 x 125 ft., rein.-con., brick and steel, plain foundation, Main St., in Scotia Twp. $250,000.

N. Y., Wende (Millgrove, P. O.)—Home and Infirmary—Sept. 4, by Bd. Supervs. Erie Co., City Hall, Buffalo, 2 and 3 story, rein.-con., brick, stone, steel, etc., here. $1,500,000. F. J. and W. A. Kidd, 542 Franklin St., Buffalo, archts.

Buildings (Continued)

Pa., Scranton—Hospital—Aug. 6, by W. G. Watkins, Court House, addition to hospital, frame and stucco, at West Mountain, for Comrs. Lackawanna Co. $300,000. D. H. Morgan, Connell Bldg., archt. Noted Mar. 22.

W. Va., Institute—School—Sept. 28, by State Bd. Control, Charleston, 3 story, 76 x 288 ft. with 81 x 90 ft. ell, brick, steel and stone. $250,000. Warne, Tucker & Patteson, Masonic Bldg., Charleston, archts. Noted July 12.

Mich., Alpena—School—Aug. 7, by E. R. Nicholson, secy. Bd. Educ., 2 story and basement, 62 x 137 ft., brick and concrete, in Union School Dist. $150,000. W. Holmes-Powers Co., Tussing Bldg., Lansing, archts.

Ill., Chicago—Apartment—H. J. Liedberg, archt., 77 West Washington St., receiving bids 3 story and basement, 110 x 124 ft., fireproof, Sheffield St. near Fullerton St. $150,000. Owner's name withheld.

Ill., Chicago—Apartment-Hotel—Olson & Urbain, archts., 155 North Clark St., receiving bids 4 story and basement, fireproof, 525-29 Arlington Pl. $750,000. Owner's name withheld.

Ill., Chicago—Apartment—M. Sugar, 4839 North Avers St., receiving bids 3 story and basement, 125 x 150 ft., fireproof, 4415-21 North Whipple St. $150,000. A. L. Himelblau, 30 North Dearborn St., archt.

Ill., Chicago—Store and Hall—Oldefest & Williams, archts., 605 North Michigan Ave., receiving bids 3 story and basement, 100 x 125 ft., fireproof, 7445-53 Cottage Grove Ave., for N. Mannos, 35 East Van Buren St. $200,000.

Ill., Quincy—Theatre, etc.—Pinkelman & Cory, c/o Gem Theatre, taking bids 2 and 4 story, 88 x 187 ft., rein.-con. and brick, concrete pile foundation, Hampden St. $250,000. Levine & Rupert, 822 West 70th St. archts.

Wis., Milwaukee—Exchange—July 31, by A. C. Eschweiler, archt., 141 Wisconsin St., 5 story, 120 x 120 ft., brick and concrete addition, Bway., for Wisconsin Telephone Co., 418 Bway. $500,000. Structural steel contract awarded. Noted Apr. 26.

Wis., Verona—Asylum—Aug. 1, by Dane Co., c/o M. Sommers, 512 West Wilson St., 4 story, 100 x 140 ft., brick, rein.-con. and steel, plain foundation. $150,000. A. D. Conover, Tenney Bldg., Madison, archt. Noted June 14.

Tex., Dallas—Church—Sept. 15, by East Dallas Christian Church, Peak and Junius Sts., 2 story and basement, 83 x 170 ft., brick, concrete and terra cotta, plain foundation. $200,000. C. D. Hill & Co., Central State Bank Bldg., engrs. and archts. Noted May 24.

Tex., Ft. Worth—Club—Aug. 20, by South Side Lodge A.F.&A.M., 1114, 1300½ Henderson St., 4 story and basement, 75 x 100 ft., steel and brick, $150,000. J. B. Davies, 1312 Hemphill St., archt. and engr. Noted June 7.

Calif., Los Angeles—Store and Loft—Morgan, Walls & Morgan, archts., Van Nuys Bldg., receiving bids 2 story, 70 x 130 ft. and 4 story, 40 x 100 ft., brick, Parkview and 7th Sts., for S. Thorpe, Merchants Natl. Bank Bldg. Noted June 21.

B. C., Kamloop—School—Aug. 4, by D. C. Scott, Dept. Indian Affairs, Ottawa, 2 story, brick and timber, Indian Reserve. $175,000. Dept. Indian Affairs, Ottawa, archts.

BIDS RECEIVED

Ia., Winfield—School—School Bd., 2 story and basement, brick and stone, plain foundation, from C. W. Getchell, 2910 High St., Des Moines, $129,920. Noted June 14.

Okla., Pawhuska—Hotel—C. A. and J. L. Duncan, 5 story, 52 x 190 ft., brick, from Turner Constr. Co., Miami, $174,671. Noted June 28.

CONTRACTS AWARDED

Mass., Brighton (Boston P. O.)—Hospital—St. Elizabeth's Hospital, 731 Cambridge St., 4 story, 100 x 150 ft., brick and steel, to M. W. Ryan, 2 Central Sq., Cambridge (Boston P. O.), $250,000.

Mass., Cambridge—Court House—Comrs. Middlesex Co., altering and constructing 3 story, 65 x 80 ft., brick and steel addition, to Hudson Constr. Co., 6 Beacon St., Boston, $241,741.

Mass., Chicopee — Dormitory — Roman Catholic Bishop of Springfield, Eliot St., Springfield, 4 story, 123 x 142 ft., brick and steel, Springfield St., here, to Lafrance Constr. Co., 292 Maple St., Holyoke, $225,000. Archts. est $200,000. Noted June 14.

Mass., Needham — High School — School Comn., 2 story, 65 x 216 ft. with 21 x 66 ft. ell, brick and steel, Highland and Oakland Aves., to J. P. Keating, 80 Boylston St., Boston, $250,000. Noted April 4.

Mass., Newton — School — St. Bernards Parish, Washington St., 2 story, 60 x 110 ft., brick and steel, to J. B. Byrne, 71 Magazine St., Cambridge. $150,000.

Mass., Springfield — High School — City Property Comn., City Hall, 3 story and basement, 73 x 330 ft. addition to Technical High School, rein.-con. and brick, plain foundation, Eliot St., to A. E. Stephens Co., 145 State St. Archts. est. $800,000.

Mass., Worcester — Business — State Mutual Life Assurance Co., 340 Main St., 4 story, 112 x 188 ft., brick and steel, plain foundation, Maple St., to E. J. Cross Co., 82 Foster St. Archts. est. $500,000.

Pa., Pittsburgh—School—Bd. Educ., Fulton Bldg., rejected bids 2 story and basement, rein.-con., brick, stone and tile, Boggs Ave. $200,000. Will readvertise soon. S. F. Heckert, Bessemer Bldg., archt. Noted July 19.

Md., Baltimore — Dormitory — State Bd. Educ., Towson, 5 story, 40 x 140 ft. brick addition, here, to Consolidated Eng. Co., Calvert Bldg., Baltimore. Archts. est. $150,000. Noted July 5.

Md., Baltimore—Parish House—O. G. Simonson Inc., archts., Maryland Casualty Tower, 2 story and basement, 55 x 160 ft., brick, Lombard and Catherine Sts., to J. L. Robinson Constr. Co., 1130 West Lafayette Ave., $150,000, for St. Johns Evangelical Lutheran Church. Noted June 7.

Fla., Miami—Apartment—E. C. McAllister et al, 8 story, brick and terra cotta, East Flagler St., to G. W. Langford Co., Col. Bldg., Louisville, Ky. Archts. est. $872,000.

Ky., Louisville — Clinic — T. M. Dorsey, Francis Bldg., 3 story (ultimately 6 story), 45 x 134 ft., 2nd and Chestnut Sts., to Webb Clark Co., 422 West Liberty St. Archts. est. $85,000 (ultimately $150,000). Noted May 17.

O., Canton—School—Bd. Educ. remodeling present building and erecting 10 room addition, brick with limestone or sandstone trim, 9th St. N. E., to Melbourne Constr. Co., Clark Bldg., $151,415.

O., Cleveland—Church and School—Our Lady of Angels Church, 319 Canal Rd., 2 story and basement, 75 x 83 ft., brick, steel and concrete, 3644 Rocky River Dr., to Hebing Co., West 54th St. Archts. est. $150,000.

O., St. Marys—High and Grade School—Bd. Educ. 2 story and basement, brick and concrete, to H. R. Blagg Co., 1229 East 3rd St., Dayton, $224,800. Noted July 5.

Ill., Chicago—Apartment—W. C. Presto, archt., 111 West Washington St., 3 story and basement, fireproof, Foster St. near Pauline St., to J. E. Grimes, 111 West Washington St. Archts. est. $150,000. Owner's name withheld.

Ill., Chicago—Apartment-Hotel—Terrace Apartment Hotel Co., c/o R. S. De Golyer, archt., 7 South Dearborn St., 9 story, 43 x 90 ft., fireproof, 806-808 Junior Terrace, to Moraw Building Co., 6407 South Park Ave. Archts. est. $200,000. Noted May 24.

Ill., Chicago—Apartment—Leichenko & Esser, archts., 38 South Dearborn St., 3 story, 70 x 160 ft., fireproof, South Shore Dr. and East 72nd St., to Nelson & Lind, 6404 South State St. Archts. est. $200,000.

Ill., Evanston—Store and Office—Church Street Bldg. Corp., 40 North Dearborn St., Chicago, 2 story and basement, fireproof, Church, Sherman and Orrington Sts., here, to Nelson & Borg, 5853 Glenwood Ave., Chicago. Archts. est. $200,000. Noted Jan. 11.

Ill., Streator—School—Bd. Educ., 2 story and basement, rein.-con., brick and stone, general contract to F. L. Damon, 105 East Bway., Centralia. Archts. est. $500,000. Noted Apr. 6, 1922.

Wis., Manitowoc—Hospital—Holy Family Hospital, c/o Franciscan Sisters, Alverno, R. F. D. Manitowoc, 4 story, 50 x 250 ft., brick and concrete addition, plain foundation, to Hutter Constr. Co., 128 Western Ave., Fond du Lac, $164,437. Noted July 12.

Kan., Leavenworth—High School—Bd. Educ., general contract 2 story and basement, 120 x 170 ft., brick, rein.-con. and stone, to G. Walker, Salina, $171,000. Noted June 28.

N. D., Bismarck—Cathedral—Holy Ghost Cathedral, c/o V. Wehrle, bishop, general contract 110 x 320 ft., brick, steel and stone, to W. H. Arrell, 711 21st Ave. N., Minneapolis, Minn., $500,000. Noted April 5.

Mo., Kansas City—School—Bd. Educ., 2 story, 42 x 82 ft., rein.-con., brick and stone, 50th and Garfield Sts., general contract to U. B. Senter, Okmulgee, Okla., $193,588.

Mo., St. Louis—Apartment—S. Hamburg, Jr. Real Estate Co., Arcade Bldg., 3 story and basement, rein.-con. and brick, plain foundation, Skinker Rd., to J. Black Masonry & Contg. Co., Arcade Bldg. Archts. est. $270,000.

Mo., St. Louis—Temple—York Rite Temple Assn., 5 story (equal to 14 story), 160 x 300 ft., rein.-con., brick, steel, stone and marble, caisson foundation, Lindell Blvd., to Westlake Constr. Co., Ry. Exch. Bldg., fee basis. Archts. est. $3,000,000. Noted May 25.

Wyo., Laramie—Gymnasium—State Bd. Educ., 3 story, 160 x 180 ft., rein.-con. and limestone, University Campus, here, to J. A. Johnson, Casper, $276,974. Archts. est $300,000. Noted Jan. 18.

Ore., Portland—High School—Bd. Educ. School Dist. 1, 4 story and basement, 160 x 178 ft., rein.-con., plain foundation, 7th and Clackamas Sts., to Parkers & Bamfield, 62 East 3rd St., $496,350. Noted June 21.

Calif., Los Angeles—Hall—Los Angeles Co., steel for hall of justice, to W. K. Kyle, I. W. Hellman Bldg., $802,900.

Calif., Los Angeles—Store and Loft—W. W. Paden, c/o E. L. Mayberry, archt., Pacific Electric Bldg., 13 story and basement, rein.-con., Hill St., to Robertson & Evans, Grant Bldg., $350,000. Noted Mar. 29.

Calif., Sacramento—Store—W. R. Davis & Bro., 2433 Mission St., reconstructing 3 story and basement, concrete, Mission St. near 22nd St., to C. Stockholm & Son, Monadnock Bldg., $150,000.

Ont., Kitchener—Hospital—Sisters of Mt. St. Joseph, Hamilton, 3 story and basement, 50 x 180 ft. with two 48 x 102 ft. wings, brick and steel, here, to W. M. Sutherland Constr. Co., 43 Adelaide St. W., Toronto. Archts. est. $445,000. Noted June 21.

Federal Government Work

PROPOSED WORK

D. C., Bellevue — Barracks, etc.—Spec. 4889—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans barracks, garage and generating building, here.

Va., Ft. Humphreys—Transmission Line—Constructing Quartermaster plans electric transmission line from here to Ft. Hunt.

Fla., Pensacola—Loop—Spec. 4884—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans circulating loop, here.

Ill., Great Lakes—Ward—Spec. 4883—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans psychiatrical ward, here.

Mo., Excelsior Springs—Hospital—Spec. 4887—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans hospital buildings, here.

Calif., San Diego—Dredging—Spec. 4885—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans dredging, here. Bids to be opened at local yard.

Calif., San Diego—Filling—Spec. 4888—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans additional filling, here.

BIDS DESIRED

Massachusetts—Dredging—Aug. 17, at office U. S. Engineer, Providence, R. I., dredging in New Bedford and Fairhaven Harbor, here; adv. this issue.

Mass., Chelsea—Reroofing—Spec. 4886—Aug. 8 by Bureau Yards & Docks, Navy Dept., Wash., D. C. reroofing buildings at Naval Hospital, here.

Conn., Norwalk—Dredging—Aug. 22, at office U. S. Engineer, Providence, R. I., dredging in Harbor, here; adv. this issue.

Federal Government Work (Continued)

N. Y., Buffalo—Dredging, etc.—Aug. 3, at office U. S. Engineer, dredging and rock removal in Black Rock Channel; adv. this issue. Noted July 12.

N. Y., Chelsea—Water Supply—Aug. 15, by J. A. Wetmore, acting superv. archt., Treas. Dept., Wash., D. C., water supply system at U. S. Veterans Hospital, here.

Md., Annapolis—Water Softening Plant—Spec. 4836—Aug. 8 by Bureau Yards & Docks, Navy Dept., Wash., D. C., water softening plant, at Naval Academy, here. Noted Apr. 19.

Tenn., Memphis—Sub Post Office—Aug. 22 by Treas. Dept., Wash., D. C., sub post office, here, J. A. Wetmore, acting superv. archt. Noted May 18.

Ky., Louisville—Pump—July 30, by U. S. Engineer, P. O. Box 72, one vertical centrifugal pump to deliver 7,000 g.p.m. against head of 25 ft., complete with motor base, etc., 450 to 575 r.p.m.

Mich., Ludington—Superstructure—Aug. 28, at office U. S. Engineer, Milwaukee, Wis., removing timber superstructure and constructing concrete superstructure, here; adv. this issue.

Ill., Evanston—Extension—Aug. 16, at office J. A. Wetmore, superv. archt., Treas. Dept., Wash., D. C., for extension with driveway at U. S. Post Office, here; adv. this issue.

Wyoming — Road — July 31 by J. W. Johnson, dist. engr., U. S. Bureau Pub. Rds., 301 Custom House Bldg., Denver, Colo., grading 4.6 mi. Dayton-Steamboat National Forest Rd., Sheridan Co., here, 9,592 cu.yd. rock and 43,328 cu.yd. common excav., etc.

New Mexico—Road—Aug. 6, by E. S. Wheeler, dist. engr., U. S. Bureau Pub. Rds., Dept. Agriculture, 242 West Washington St., Phoenix, Ariz., constructing or improving 11.09 mi. Glenwood Reserve Sect. 4, Forest Highway, 12 or 14 ft. roadway, 178,106 or 193,490 cu.yd. excav., etc. Datil National Forest, Catron Co., here. Noted June 14.

Calif., San Diego—Barracks, etc.—Spec. 4843—Aug. 15 by Bureau Yards & Docks, Navy Dept., Wash., D. C., barracks and extension to mess hall at Training Station, here. Noted May 18.

BIDS RECEIVED

La., New Orleans—Dredging—U. S. Engineer, 329 Custom House, dredging 5 mi. Calcasieu-Sabine Sect., Intracostal Waterway, 998,000 cu.yd. excav., from H. Reynolds, Maison Blanche Bldg., $0.1204. Noted June 21.

Ill., Great Lakes—Incinerator, etc.—Spec. 4869—Bureau Yards & Docks, Navy Dept., Wash., D. C., incinerator, chimney and fine, at Naval Training Sta., here, (1) net price for entire work, from Jones Odorless Garbage Crematory, 1317 Syndicate Trust Bldg., St. Louis, Mo., (1) $10,342 (2) $150 (3) $325 (4) $4,000.

Oregon—Road—U. S. Bureau Pub. Rds., Post Office Bldg., Portland, grading and crushed rock surfacing. Oregon National Forest Rd., Clackamas Co., from Elliott, Scogin & Pacquet, McKay Bldg., Portland, 13,000 cu.yd. crushed rock $3.25, 32,700 ft. subgrade, per 100 ft., $3, etc., total $45,181.

California—Bridges—U. S. Bureau Pub. Rds., Mills Bldg., San Francisco, Pine Creek Bridge, three 40 ft. concrete girders and Alviso Creek Bridge, two 40 ft. girders on concrete piers and abutments, east of Santa Maria, in Santa Barbara Co., from J. Short, Los Angeles, $27,905. Noted June 27.

H. T., Pearl Harbor—Extension—Spec. 4761—Bureau Yards & Docks, Navy Dept., Wash., D. C., July 18, extension for battery storage and overhaul, here, (1) work complete, from Walker & Olin, Honolulu, (1) $88,900 (210 days) (2) $88,900 (210 days) (3) $5,600 (4) $5,600 (5) add $750 (6) add $4,87. Noted June 21.

H. T., Pearl Harbor—Fire Protection System—Spec. 4827—Bureau Yards & Docks, Navy Dept., Wash., D. C., July 18, fire protection system at Naval Operation Base, here, from Hawaiian Constr. Co., Honolulu, $28,860 (180 days). Noted May 31.

H. T., Pearl Harbor—Storage Facilities—Spec. 4760—Bureau Yards & Docks, Navy Dept., Wash., D. C., July 18, mine storage facilities at Naval Operating Base, here, (1) work complete, from W. F. Martens, 112 Cutler Bldg., Rochester, N. Y., (1) $87,497 (310 days) (2) $86,497 (310 days) (3) add $4,100 (15 days), deduct $2,860 (5 days) (4) add $4,050 (15 days) deduct $2,810 (5 days). Noted June 7.

CONTRACTS AWARDED

N. Y., Brooklyn—Steam Main—Spec. 4856—Bureau Yards & Docks, Navy Dept., Wash., D. C., steam main at Navy Supply Depot here, to Fort Dodge, Boiler Wks., Ft. Dodge, Ia., $4,475 (90 days).

Miscellaneous

PROPOSED WORK

Dock Facilities, etc.—Middletown, Conn.—See "Industrial Works."

Heating Work, etc.—Hudson, N. Y.—Aug. 10, by W. L. Visscher, pres. Bd. Mgrs. New York State Training School for Girls, heating work, replacing underground steam and water mains, at school. S. W. Jones, Albany, state archt.; adv. this issue.

Elimination of Grade Crossings—Rochester, N. Y.—New York Central R.R. Co., Grand Central Terminal, New York City, having preliminary surveys made eliminating grade crossings at Winton and East Aves., here. $1,000,000. G. W. Kittredge, ch. engr.

Cemetery Improvements—Corry, Pa.—Pine Grove Cemetery plans improvements to cemetery, incl. brick pillars at entrance, rebuilding fence, roadways, etc. $26,000. D. W. DeRosary, Corry, archt. and engr.

Foundation—New Castle, Pa.—Aug. 1, by Scottish Rite Bodies, F.A.M., foundation for 2 story and basement, 181 x 244 ft., brick or stone, Hiland and Lincoln Sts. Total cost $1,000,000. R. G. Schmid & Co., 152 East Randolph St., Chicago, archts.

Coal Handling Plant, etc.—Cabin Creek Junction (Coalburg P. O.), **W. Va.** — Virginian Power Co., Union Trust bbgkqjj Charleston, having plans prepared coal storage basin, extension to power house, and dredging, here. H. L. Doherty & Co., 60 Wall St., New York City, engrs.

Mechanical Equipment — Sylva, N. C.—Cullohwee Normal and Industrial School plans installing boilers, engines, generators, switchboard, pipe tunnels and water facilities. H. A. Underwood, Raleigh, engr.

Bulkhead—Indian River City, Fla.—Indian River City Town Site Corp. having plans prepared 3,000 ft. bulkhead, 400 ft. out from meander line of Indian River, 600 ft. causeway to connect with artificial island of about 5 acres. $150,000. H. F. Williams, c/o Hotel Pines, Titusville, mgr.

Golf Course, etc. — Indian River City, Fla.—Indian River City Town Site Corp. having plans prepared 18 hole golf course and club house. $100,000. Marsh & Saxelbye, 415 West Bldg., Jacksonville, archts.

Pier and Yacht Basin—Sanford, Fla.—City rescinded contract for pier and yacht basin. Will readvertise. F. T. Williams, Sanford, engr. Noted July 5.

Seawalls—West Palm Beach, Fla.—Election Aug. 14, to vote on $100,000 bonds for seawalls. K. Riddle, city mgr. Noted Feb. 1.

Landing and Facade—New Orleans, La.—Bd. Port. Comrs., New Court Bldg., takes bids about Aug. 1 for Canal St. G Ferry landing and facade. Work involves ferry house and bridge approach, with double deck superstructure on rein.-con. foundation 40 x 110 ft. $150,000.

Wharf Extension—New Orleans, La.—Bd. Port Comrs., New Court Bldg., takes bids about October, extending wharf, Poland St., 400 ft. long 230 ft. wide.

Train Shed and Loading Platform—Cleveland, O.—Fisher Body Ohio Co., c/o E. S. Fisher, General Motors Bldg., Detroit, Mich., taking bids 1 story, 78 x 562 ft. brick and steel, East 140th St. and Colt Rd., here. $150,000. Private plans.

Pleasure Resort — Findlay, O. — M. L. Kelley, Mt. Vernon, plans pleasure resort at Rock Run Cave, near here. Work includes enlarging cave, etc. To exceed $25,000.

River Freight Terminal—Jeffersonville, Ind.—Inland Waterways Co., 316 West Jefferson St., Louisville, Ky., plans river freight terminal, here. $40,000. P. Calhoun, pres.

Subway — Memphis, Tenn. — City and Southern R.R., 1300 Penn Ave., Wash., D. C., plan subway at Bellevue Blvd. and Bway. $200,000. W. B. Fowler, city engr.

Operating Quarries—Missouri—Aug. 11, by State Hy. Comn., Jefferson City, operating 3 quarries in Cooper and Saline Counties. B. H. Piepmeier, ch. engr.; adv. this issue.

Stadium—Tyler, Tex.—Bd. Educ. having plans prepared athletic stadium. $30,000. Dewitt & Lemmon, Southwestern Life Bldg., Dallas, engrs. and archts.

Lumber Town, etc.—Oregon—G. H. Kelly, Spaulding Bldg., Oregon, having plans prepared by W. J. Morris, Spaulding Bldg., new lumber town, 4 mi. east of Oakridge, incl. electric driven sawmill, planing mill, dry kilns, storage sheds and yards, 8 mi. main logging road, standard gauge, 80 lb. rails, spurs and sidings, machine shop, 200 houses, stores, etc. $2,000,000.

Tract Development—Carmel, Calif.—G. G. Moore, 52 Vanderbilt Ave., New York City, had plans prepared developing 25,000 acres in Monterey Co., near here, incl. 8 mi. highway, irrigation ditches, pumping plants, buildings, etc. To exceed $300,000. P. R. Gadd, Forum Bldg., Sacramento, engr.

Park Improvements — Merced, Calif. — Plans to vote on $25,000 bonds for park improvements on Bear Creek.

Grain Elevator—Halifax, N. S.—Dept. Pub. Wks., Railways and Canals, Ottawa, plans grain elevator, here. $200,000. K. M. Cameron, acting ch. engr. Pub. Wks.

Harbor Improvements, etc. — Ontario — Dept. Pub. Wks., Parliament Buildings, Ottawa, plans harbor improvements at Port Stanley $50,000, Toronto $600,000, Ft. William $192,000; wharf extension at Pelee Island $31,000; wharf repairs at Windsor $3,500, Port Burwell $2,500. K. M. Cameron, acting ch. engr.

Power Line Extension, etc.—Ontario—Ontario Hydro Power Comn., London, preparing plans extending power and lighting lines from St. Jacobs to Linwood. $36,000. A. Beck, chn.

Power Lines—Ontario—Ontario Hydro Comn., c/o A. Beck, chn., London, having plans prepared 15 mi. power and light distributing lines to Sombra and Port Lambton. $48,000. Private plans.

Oil Tanks—Oshawa, Ont.—Imperial Oil Co., Ltd., Imperial Oil Bldg., Toronto, plans concrete and steel storage oil tanks, here. $40,000. Private plans.

Elevator Extension—Port Colborne, Ont.—Dept. Pub. Wks., Railways and Canals, Ottawa, plans elevator extension, here. $350,000. K. M. Cameron, acting ch. engr. Pub. Wks.

Power Distribution—Toronto, Ont.—York Twp. voted $200,000 bonds for extending hydro-electric power distribution system throughout township. Work under supervision of Hydroelectric Power Comn., 190 University Ave. W. A. Clarke, 40 Jarvis St., clk.

Pier—Hamilton Beach, Ont.—Dept. Pub. Wks., Parliament Bldgs., Ottawa, voted $50,000 bonds for pier, (mostly wood construction), here. K. M. Cameron, ch. engr.

Wading Pools—Windsor, Ont.—City plans 6 concrete wading pools, one in Clay Park, Assumption School, McDougall St., Dougall Rd. Park, Church St. and West end of city. $50,000. M. E. Brian, City Hall, engr.

Grain Elevator—Edmonton, Alta.—Dept. Pub. Wks., Railways and Canals, Ottawa, plans grain elevator, here. $200,000. K. M. Cameron, acting ch. engr. Pub. Wks.

BIDS DESIRED

Piers—New York—See "Bridges."

Heating Work—Syracuse, N. Y.—Aug. 7, by G. R. Lunn, lieutenant governor, pres. State Fair Comn., 428 South Salina St., heating work for coliseum, New York State Fair Grounds. S. W. Jones, Albany, state archt.; adv. this issue.

Concrete Mixer, etc.—Trenton, N. J.—Aug. 3, by City Comn., one No. 7 Ramsome improved Bantam concrete mixer, 10 cu.ft. capacity, and 75 tons pulverized bauxite, for Water Dept. A. Bugbee, City Hall, engr.

Rails, Pipe, etc.—Miami, Fla.—City receiving bids for 7 mi. street railway rails, 8 mi. 30 in. c.i. or wood stave pipe, and steel sheet piling for 3,000 ft. sea wall. C. L. Huddleston, dir. finance; adv. this issue.

Mechanical and Electrical Equipment—Greensboro, N. C.—Aug. 1, by Building Comm. Agricultural and Technical College,

Miscellaneous (Continued)

plumbing, heating and electrical equipment in new dormitory and refectory buildings. H. Barton, Greensboro, archt.

Transmission Line—Iron Mountain, Mich.—Michigan Iron, Land & Lumber Co. taking bids high voltage transmission line from here to factory on Menominee River. $25,000. Mead & Seastone, Journal Bldg., Madison, Wis., engrs. Noted July 5.

Tunnels—Abilene, Tex.—McMurray College taking bids concrete or brick tunnels for heating plant. $25,000-$30,000. D. Castle & Co., Abilene, engrs.

Pipe, etc.—Sweetwater, Tex.—W. H. Bartlett, city secy., taking bids 2½ mi. 6 in. Class B, c.i. pipe, sixty-one 6 in. fire hydrant, etc.

Tunnel—Colorado — Aug. 25, by Moffat Tunnel Comn., 1731 Arapahoe St., Denver, 6.04 mi. tunnel on line of Denver & Salt Lake Ry., 50 mi. from Denver, 24 ft. high, 16 ft. wide, paralleled by pioneer or water tunnel, 8 x 8 ft. R. H. Keays, ch. engr. Noted July 6, 1922 under Denver.

Cement, etc.—San Diego, Calif.—Aug. 6, by San Diego Co., 20,500 bbl. cement and 16,000 tons crushed rock to be used on portion of Mission Rd. 1-C. J. B. McLees, co. clk.

Ice Arena—London, Ont.—Aug. 11, by Watt & Blackwell, archts., Bank of Toronto, 100 x 242 ft. ice arena, Bathurst St., for London Arena Co. $300,000. J. Pringle, pres. Prices wanted on piping and steel work.

BIDS RECEIVED

Lignim Binder—Trenton, N. J.—State Hy. Dept., 574,230 gal. lignim binder for surface treatment of gravel roads, from M. R. Young, 435 East State St., $56,275. Noted July 5.

Electrolier System—Fresno, Calif.—Furnishing and installing 155 electroliers in portions of Kerchkoff Ave., Huntington Blvd., etc., from Robinson Electric Co., 1162 Bway., $30,900. Noted July 12.

Revetment—Sacramento, Calif.—City, 4 in. concrete revetment on slope of Sacramento River, from Tieslau Bros., 2814 Grove St., Berkeley, $92,881. Noted July 12.

Cement—San Diego, Calif.—San Diego Co., July 16, 15,000 bbl. cement for highway work, from California Portland Cement Co., Timken Bldg., and Spreckels Bros. Commercial Co., Santa Fe Wharf, both $3.25 per bbl. f.o.b. plant.

CONTRACTS AWARDED

Foundation—Cambridge, Wis.—See "Industrial Works."

Elevation of Tracks — Chicago, Ill. — Pennsylvania R.R. System, Pennsylvania Bldg., filling and track work in connection with elevation of tracks at Garfield Blvd., to J. G. Kenan Co., 4300 Euclid Bldg., Cleveland, O.

Tanks—Mexia, Tex.—Sinclair Crude Oil Purchasing Co., 10 additional 55,000 bbl. tanks, here, to Chicago Bridge & Iron Wks., 30 Church St., New York City. Noted July 5.

Grain Elevator—Vancouver, B. C.—Harbor Comrs., 712 Pender St., W., superstructure and foundation for elevator No. 2, rein.-con., to Northern Constr. Co., 736 Granville St., $1,450,000, and $150,000 respectively. Noted May 24.

Cement—San Diego, Calif.—W. H. Cameron, city purch. agt., 18,600 bbl. cement for use in construction of wharf for Municipal Pier 2, f.o.b. San Diego, to Fenton-Parker Material Co., 168 10th St., J. S. Schirm Commercial Co., 268 4th St., and W. J. Bailey Co., 708 West G St., all bid $3.76 per bbl. Each contract involves 6,200 bbl.

Pier—San Diego, Calif. — City Council, for Contr. B, on Municipal Pier 2, comprising concrete apron wharf for mole type pier, to F. H. Doran, 3735 7th St., $252,700. Noted June 28.

Elevator — Vancouver, B. C. — Harbor Comrs., 712 Pender St., W., superstructure of addition to elevator No. 1, rein.-con., to Pacific Constr. Co., Ltd., foot Salisbury Dr., $350,000.

Grain Elevator—Tiffin, Ont.—Canadian Natl. R.R. Co., 230 St. James St., Montreal, Que., 2,500,000 bu. elevator, here, to Fegles Constr. Co., Ft. William.

OFFICIAL PROPOSALS

Rails, Pipe Piling

Miami, Fla.

The City of Miami is in immediate need of:

Approximately seven miles of street railway rails with necessary connections and spikes.

Eight miles of 30-in. cast iron or wood stave water pipe suitable for 100 ft. head.

Steel sheet piling for 3,000 ft. sea wall.

This material will be purchased by the undersigned at the lowest price obtainable. Bidders should furnish descriptive pamphlets with prices on the different makes.

C. L. HUDDLESTON,
Director of Finance.

Bids: Aug. 6.

Grading, Curbing and Paving

Highland Park, N. J.

Sealed proposals will be received by the Mayor and Borough Council of the Borough of Highland Park, N. J., at the Council Chambers, in the Masonic Building, (Second Floor) at the Northeast corner of Raritan Avenue and Fourth Avenue, Highland Park, N. J., on Monday August 6, 1923, at 8 o'clock P.M., ordinance time, (7 P.M. Eastern Standard time) for the grading, curbing and paving of portions of

Harrison Avenue,
Walter Avenue,
Harper Street,
Harper Place,
S. Fourth Avenue.

The work will in general consist of about

4,527 Cu. Yds. of Excavation.
11,422 Sq. Yds. of One Course Reinforced Cement Concrete Pavement, 6" in depth at the sides, and 8" in depth at the center.
4,965 Lin. Ft. of concrete Curbing, set integral with the pavement.

All of said work to be done in accordance with the plans, profiles and specifications prepared by Raymond P. Wilson, Civil Engineer, 46 Paterson Street, New Brunswick, N. J., which said plans, profiles and specifications have been adopted by the Borough Council of the Borough of Highland Park, and are now on file at the office of the Borough Collector, No. 10 North Second Avenue, Highland Park, N. J., where they may be seen by bidders or a set of the said plans, profiles and specifications can be secured from Raymond P. Wilson, Civil Engr., by depositing five dollars ($5.00) which sum will be refunded on return of the plans, profiles and specification within seven (7) days after the award of the contract. All bids must be on the form of proposal to be obtained from the Engineer.

Each bidder must accompany his bid by a certified check for four thousand dollars, ($4,000) payable unconditionally to the Collector of the Borough of Highland Park, which said check must be presented with the bid as a guarantee that the bidder will, if the contract be awarded to him, within ten days after receiving the award enter into and execute a contract for the faithful performance of the work to be done under said contract. Each bid must be in a sealed envelope and marked "Proposal for concrete pavements." The successful bidder will be required to furnish a Surety Company Bond to the Borough of Highland Park in the full amount of the contract price, for the faithful performance of the work to be done under said contract, said bond to be approved by the Borough Attorney.

In case of failure to execute the contract and furnish the required Surety Company bond within ten (10) days after due notice that the contract has been awarded to him, the successful bidder shall forfeit his deposit to the Borough of Highland Park as liquidated damages.

The Borough of Highland Park shall reserve the right to reject any or all bids.

All of said work shall be completed within sixty working days.

Bids: August 8.

Sludge Digestion Tanks and Drying Beds

Baltimore, Md.

Sealed bids or proposals, in duplicate, addressed to the Board of Awards for constructing Sludge Digestion Tanks Nos. 24, 25 and 26 and Sludge Drying Beds No. 9 and 10 at the Baltimore Sewage Treatment Works, will be received at the office of the City Register, City Hall, Baltimore, Md., until 11:00 A.M., Wednesday, August 8th, 1923, at which time and place they will be publicly opened by the Board of Awards and read.

Plans and specifications may be obtained at the office of the Highways Engineer, Room 8, City Hall, Baltimore, Md. A charge of $15.00 will be made for each set of plans and specifications, which amount will be refunded if the plans are returned in case a bid is submitted or the plans and specifications are returned in case no bid is submitted, to the office of the Highways Engineer, in good condition before 11:00 o'clock A.M. on the date set for opening bids.

The approximate quantities involved are as follows:

Excavation	13,500 cu.yds.
Rolled Embankment	8,800 cu.yds.
Concrete Masonry	4,655 cu.yds.
Reinforcing Bars	450,000 lbs.
Sand for Sludge Beds....	1,100 cu.yds.
Four (4) Inch Drain Tile..	4,500 lin.ft.
Sluice Gates and Gate Valves	83
Cast Iron Pipe.....	87 tons
Industrial Railroad Track	910 lin.ft.
Gravel for Sludge Beds..	3,000 cu.yds.

Bond in the amount of the contract price will be required of the successful bidder.

The Board of Awards reserves the right to reject any and all bids.

Certified check of the bidder on a clearing-house bank, made payable to the Mayor and City Council of Baltimore in the amount of Ten Thousand Dolars ($10,000) must accompany each bid.

Approved:

BERNARD L. CROZIER,
Highways Engineer.
STEUART PURCELL,
Chief Engineer.

HOWARD W. JACKSON,
President, Board of Awards.

Approved:
FRANK DRISCOLL,
Asst. City Solicitor.

Bids: July 31.

Bridges

Baltimore, Md.

SEALED PROPOSALS for building the following bridges:

Frederick Co. Cont. F-65—Reinforced concrete arch bridge over Toms Creek near Emmitsburg on the road from Frederick to Emmitsburg, consisting of a single span 80' 0" Clear and a 24' 0" clear roadway.

Garrett Co. Cont. G-26—Reinforced concrete arch bridge over Youghiogheny River near Crellin on the road from Oakland to Hutton.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 31st day of July, 1923, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 17th day of July, 1923.

JOHN N. MACKALL,
Chairman.
L. H. STEUART,
Secretary.

Bids: Aug. 15.

Centrifugal Pumps

Wellsburg, W. Va.

The City Water Board of Wellsburg, West Virginia, will receive bids up to 7:30 P.M., Eastern Standard Time, August 15th, 1923, for the furnishing and installation of a two million gallon motor driven centrifugal low-lift pump and a two million gallon motor driven centrifugal high-lift pump with all necessary appurtenances, as specified by the engineers. Also the structural work in connection with the division and lining of a dry well, which consists principally of approximately 100 cubic yards of reinforced concrete. The piping incidental to the installation will also be included in the bid. The work will be divided into two parts; that of the mechanical features and that of the structural features and contractors may bid upon either one or both parts.

For full particulars, bidding blanks, specifications and other data apply to the engineers, Hudson & Myron, 808 Wabash Building, after July 25th, 1923.

The City Water Board reserves the right to reject any or all bids, or any part of any or all bids.

E. A. SHEETS, President.
J. F. THOMPSON, Secretary.

HUDSON & MYRON, Engineers,
808 Wabash Building,
Pittsburgh, Pa.